12PB, 12SB
14PB, 14SB, and 14SE
21-Inch
Walk-Behind
Rotary Mowers

(Serial No. GXXXXXX010001-)

JOHN DEERE

OPERATOR'S MANUAL

John Deere Horicon Works
OM-M79671 Issue H9
(This manual replaces OM-M79636.)

LITHO IN U.S.A.

Introduction

THANK YOU for purchasing a John Deere product.

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are U.S. customary units and their metric equivalents.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction of forward travel.

WRITE IDENTIFICATION NUMBERS in the Specifications section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate which you should have received from your dealer.

This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

M61526 -UN-01SEP88

Model 12PB, 2-Cycle Engine

M61525 -UN-01SEP88

Model 14SB, 4-Cycle Engine

Contents

	Page
Safety	2
Controls	8
Operation	9
Fuels and Lubricants	18
Troubleshooting	20
Service	22
Storage	38
Assembly	39
Specifications	42

All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

COPYRIGHT® 1988
DEERE & COMPANY
Moline, Illinois
All rights reserved
A John Deere ILLUSTRUCTION™ Manual
Previous Editions
Copyright® 1989 Deere & Company

Safety

RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

T81389 -UN-07DEC88

O53,ALERT -19-16JUN87

UNDERSTAND SIGNAL WORDS

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

Safety signs with signal word DANGER or WARNING are typically near specific hazards.

General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

TS187 -19-30SEP88

O53,SIGNAL -19-07OCT85

FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

TS201 -UN-23AUG88

O53,READ -19-23APR87

OPEI CERTIFICATION

This OPEI Label on your mower indicates that this model has been certified by an independent laboratory for compliance with American National Standard B-71.1-1986, "Safety Specifications" for Power Lawn Mowers, Lawn and Garden Tractors and Lawn Tractors.

TS288 -19-07OCT88

O53,CERT1 -19-27APR88

INSPECT MOWER REGULARLY

Check hardware often. Keep it tight.

Clean engine often, especially cooling fins.

Discharge chute or rear bag must be in good condition, and in place.

Door (on top of bag) must be working properly and in place.

M41506 -UN-06SEP88

MX,SABV,A -19-10AUG88

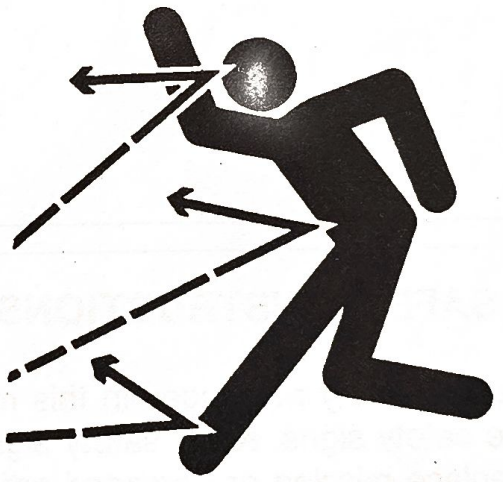
PROTECT FROM THROWN OBJECTS

Before you mow, clear mowing area of objects that might be thrown.

Discharge clippings away from people.

Discharge chute or grass bag must be in place.

Do not lift or block door open when blade is ENGAGED.



M41423 -UN-30AUG88

MX,SABV,C -19-25MAY89

PROTECT PEOPLE AND PETS

Keep people and pets out of mowing area.

Do not let children or untrained persons operate mower.

Do not leave mower unattended.

M61473 -UN-01SEP88

MX,SABV,B -19-10AUG88

OPERATE MOWER SAFELY

Do not run engine indoors unless there is good ventilation.

Be sure of footing. Walk—do not run.

Do not use mower for anything other than its original design.

Mow across face of slopes—not up and down.

Be especially careful when you change direction on slope.

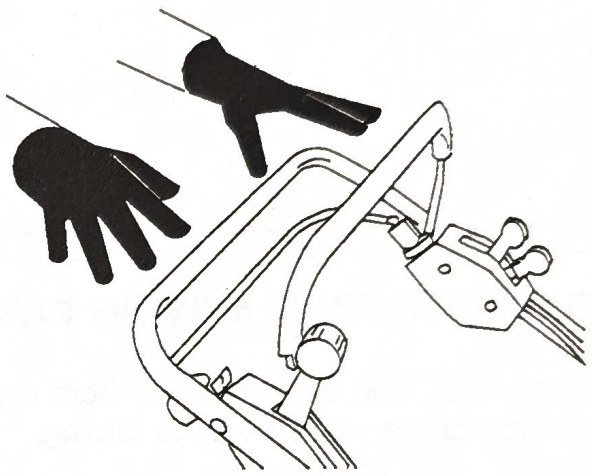
Avoid sudden starts and stops.

Do not leave mower on slope. Put mower on level surface.

MX,SABV,C1 -19-10AUG88

EMERGENCY STOP

Release handle and levers:
—Mower will stop.
—Blade will stop.
—Engine will NOT stop.



M61445 -UN-01SEP88

MX,SABV,D -19-10AUG88

HANDLE FUEL SAFELY—AVOID FIRES

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

TS202 -UN-23AUG88

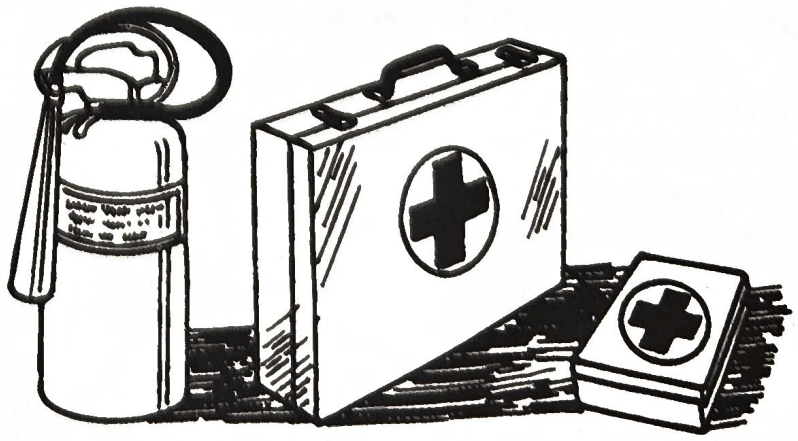
O53,FIRE1 -19-23APR87

PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



TS291 -UN-23AUG88

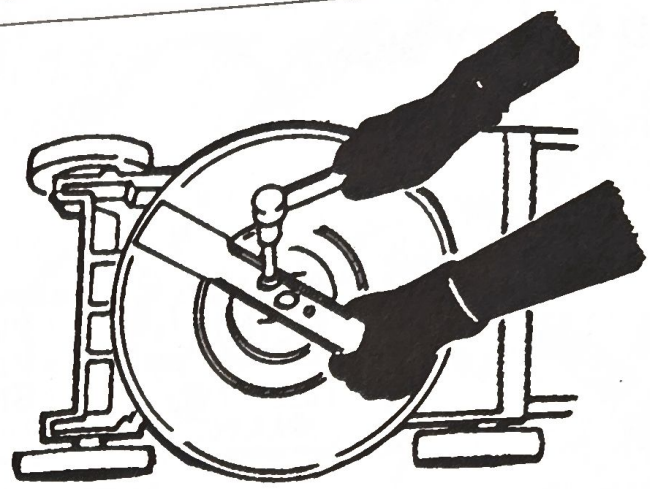
O53,FIRE2 -19-03MAR88

Wear gloves when you service blade.

Keep parts in good condition, fastened in place.

Replace worn or damaged parts immediately.

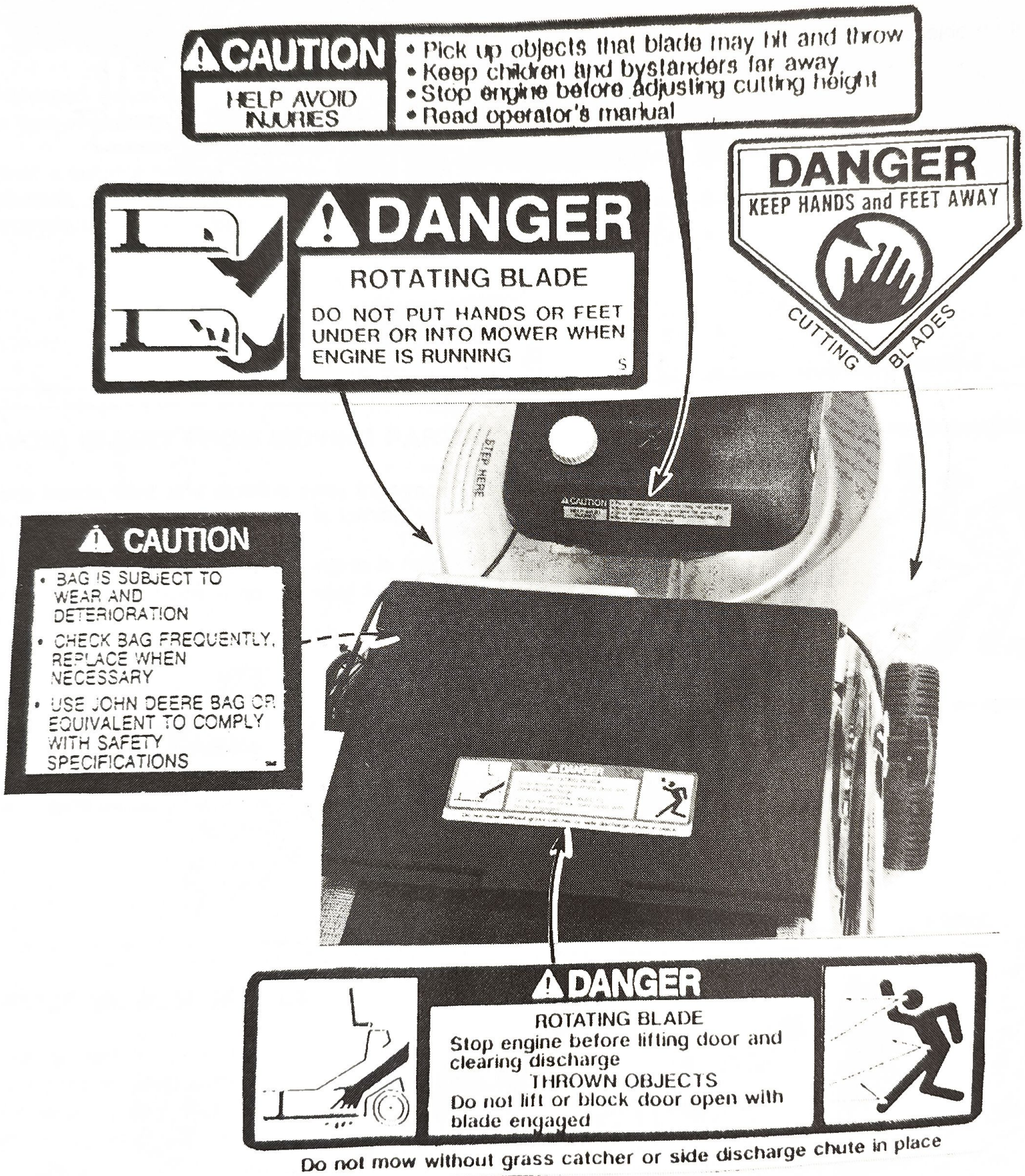
If you hit an object, stop mower. Fix damage before you operate.



M61532 -UN-01SEP88

MX,SABV,H -19-10AUG88

READ SAFETY SIGNS


CAUTION
HELP AVOID INJURIES
• Pick up objects that blade may hit and throw
• Keep children and bystanders far away
• Stop engine before adjusting cutting height
• Read operator's manual
DANGER
ROTATING BLADE
DO NOT PUT HANDS OR FEET UNDER OR INTO MOWER WHEN ENGINE IS RUNNING
DANGER
KEEP HANDS and FEET AWAY
CUTTING BLADES
CAUTION
• BAG IS SUBJECT TO WEAR AND DETERIORATION
• CHECK BAG FREQUENTLY, REPLACE WHEN NECESSARY
• USE JOHN DEERE BAG OR EQUIVALENT TO COMPLY WITH SAFETY SPECIFICATIONS
DANGER
ROTATING BLADE
Stop engine before lifting door and clearing discharge
THROWN OBJECTS
Do not lift or block door open with blade engaged
Do not mow without grass catcher or side discharge chute in place

M62531 -19-20JUN89

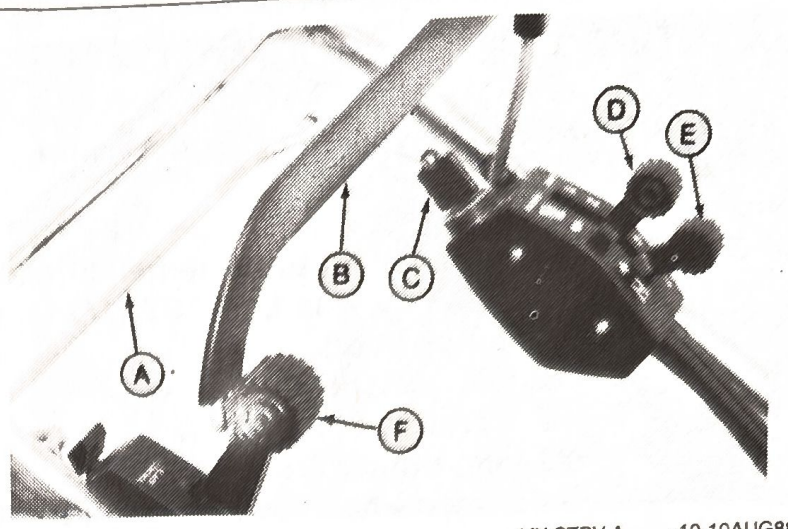
MX,SABV,I -19-08JUN89

120789

Controls

HANDLE CONTROLS

A—Traction Clutch Lever (Self-Propelled Models Only)
B—Blade Lockout/Stop Lever (All Models)
C—Key (Model 14SE only)
D—Gear Shift Lever (All Models Except 12PB and 14PB)
E—Throttle Lever (All Models)
F—Blade Engagement Lever (All Models)

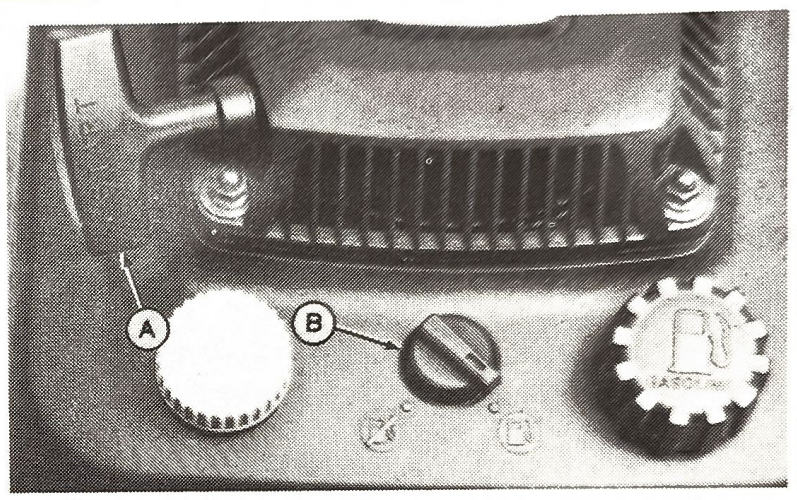


M61446 -UN-01SEP88

MX,CTBV,A -19-10AUG88

4-CYCLE ENGINE CONTROLS

A—Starter Handle
B—Fuel Shutoff Knob

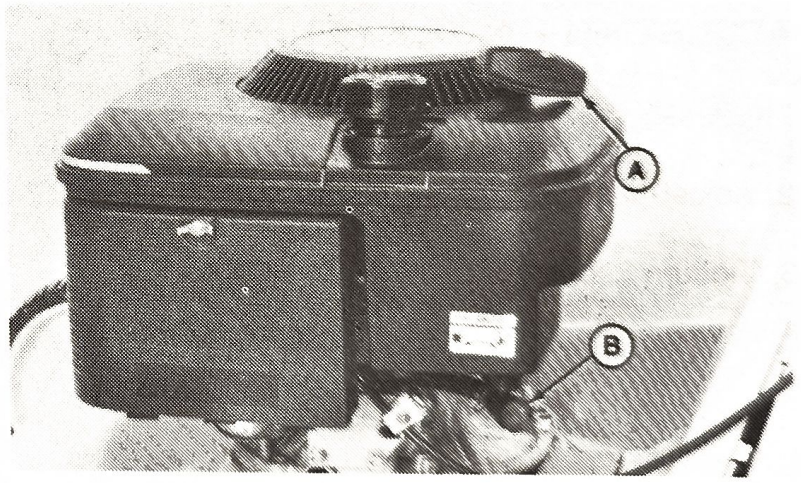


M61447 -UN-01SEP88

MX,CTBV,B -19-10AUG88

2-CYCLE ENGINE CONTROLS

A—Starter Handle
B—Fuel Shutoff Knob

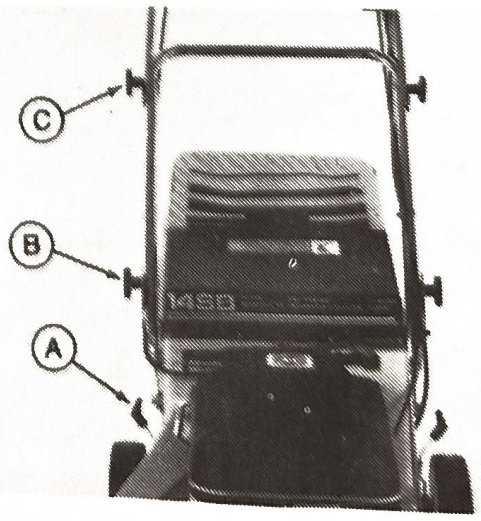


M61476 -UN-01SEP88

MX,CTBV,C -19-10AUG88

MOWER CONTROLS

A—Cutting Height Lever
B—Handle Height Knob
C—Fold-Handle Knob



M61448 -UN-06OCT88

MX,CTBV,D -19-10AUG88

ADJUSTING CUTTING HEIGHT

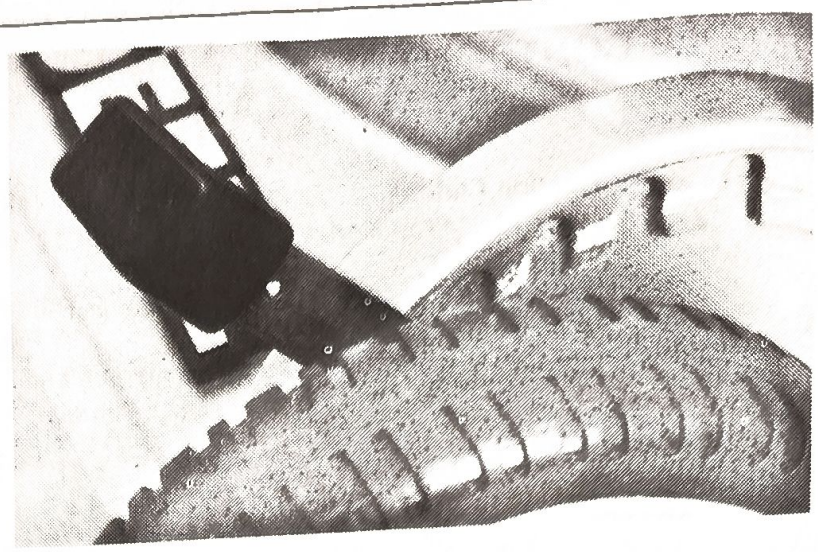
⚠ CAUTION: Before you adjust levers, stop engine.

IMPORTANT: Adjust all levers to same height except when you mow in LOWEST (1/2-in. or 13-mm) position.
For LOWEST position:
—Put front wheel levers in 1/2-in. (13-mm) notch: first rear notch.
—Put rear wheel levers in 1-in. (25-mm) notch: second rear notch.

Move each wheel lever to desired position.

Cutting height range: 1/2—3-1/2 in. (13—90 mm).

To change cutting height 1/2 in. (13 mm), move lever one notch.

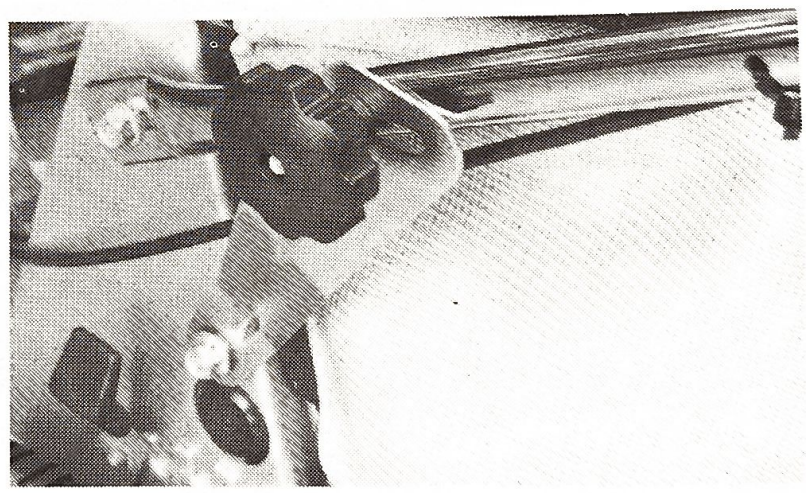


M61449 -UN-01SEP88

MX,OPBV,A -19-10AUG88

ADJUSTING HANDLE HEIGHT

1. Loosen knob on each side.
2. Adjust handle to desired position.
3. Tighten knobs.



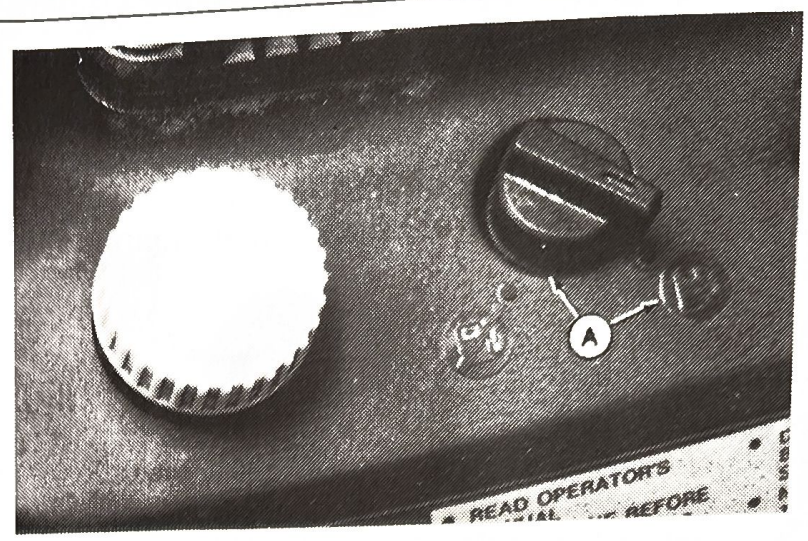
M61450 -UN-13OCT88

MX,OPBV,B -19-10AUG88

ELECTRIC STARTING—MODEL 14SE ONLY

CAUTION: Wear close-fitting clothing and safety equipment. Keep hands, feet, and clothing away from deck when engine is running.

IMPORTANT: Use only clean, fresh regular or unleaded gasoline. Be sure choke and throttle controls are in good condition and adjusted correctly.



M61451 -UN-01SEP88

1. Open fuel shutoff valve (A).

MX,OPBV,C -19-10AUG88

2. COLD ENGINE: Move throttle lever (A) to CHOKE position.

WARM ENGINE: Move throttle lever to FAST position.

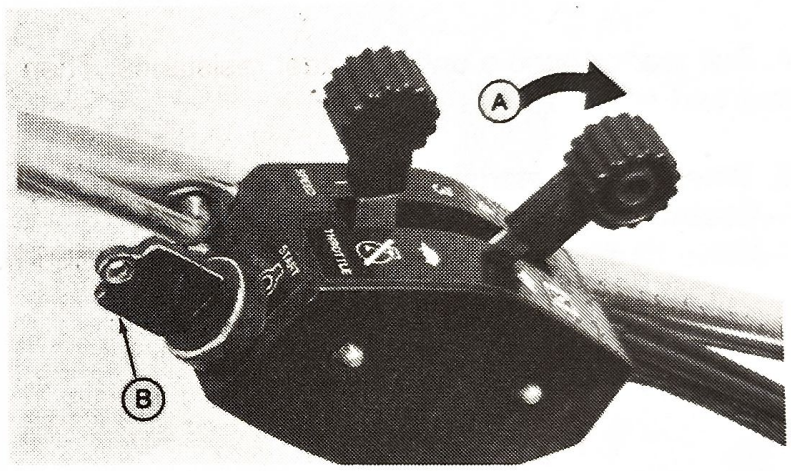
NOTE: If battery is low, start engine with recoil starter. See MANUAL STARTING in this section.

3. Turn key (B) to START position:
—Crank engine 5 seconds.
—If engine does not start, wait 10 seconds.
—Crank engine again 5 seconds.
—Repeat this procedure if necessary.

4. Release key when engine starts.

NOTE: Key will not stop engine. To stop engine, pull throttle all the way to rear.

5. Move throttle lever slowly down to HALF-THROTTLE position after engine starts.



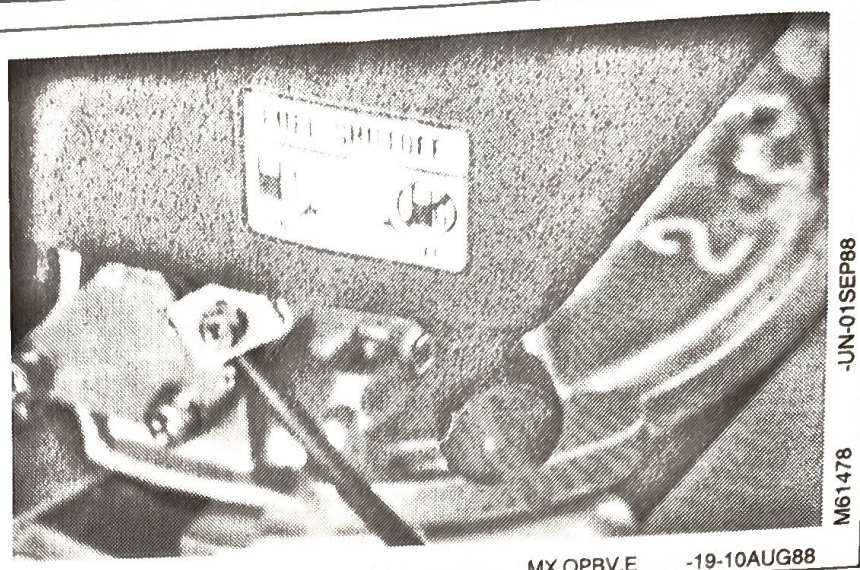
M61452 -UN-01SEP88

MX,OPBV,D -19-10AUG88

MANUAL STARTING

⚠ CAUTION: Wear close-fitting clothing and safety equipment. Keep hands, feet, and clothing away from deck when engine is running.

1. Open fuel shutoff valve:
—4-Cycle engine: See ELECTRIC STARTING in this section.
—2-Cycle engine: Shown at right.



M61478 -UN-01SEP88

MX,OPBV,E -19-10AUG88

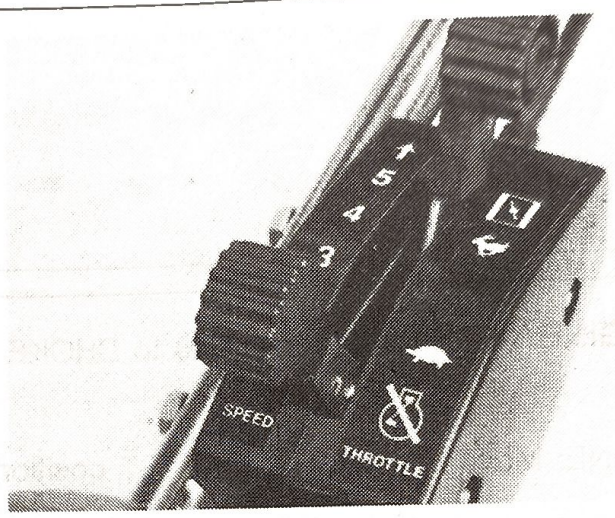
2. COLD ENGINE: Move throttle lever to CHOKE position as shown.

WARM ENGINE: Move throttle lever to FAST position (rabbit).

3. Put foot on foot pad (top, left side of deck).

4. Pull starter handle until you feel resistance. Then pull fast and steady.

5. When engine starts:
—Return rope slowly.
—Move throttle lever slowly down to HALF-THROTTLE.

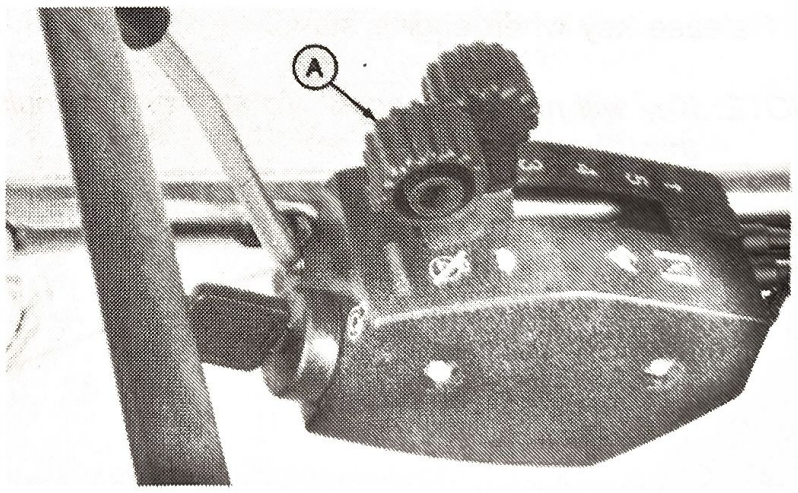


M61480 -UN-01SEP88

MX,OPBV,F -19-10AUG88

STOPPING ENGINE

To stop engine, pull throttle lever (A) to STOP position.



M61556 -UN-07DEC88

MX,OPBV,F1 -19-25MAY89

BLADE OPERATION

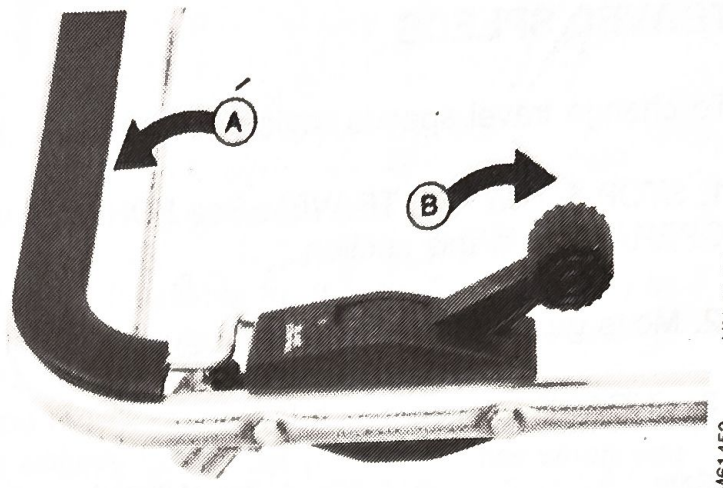
CAUTION: Keep hands, feet and clothing away from blade when engine is running. If blade does not stop within 3 seconds after you release lever, see your John Deere dealer.

Do not engage blade in heavy grass or engine may stop.

To ENGAGE blade:
—Pull and hold lever (A) against handle.
—Push lever (B) quickly until it latches.

To DISENGAGE blade: Release lever (A).

CAUTION: Do not tape lever (A) to handle. If lever (B) does not latch, do not tape it or hold it in latch position. See your John Deere dealer.



M61453 -UN-01SEP88

MX,OPBV,G -19-10AUG88

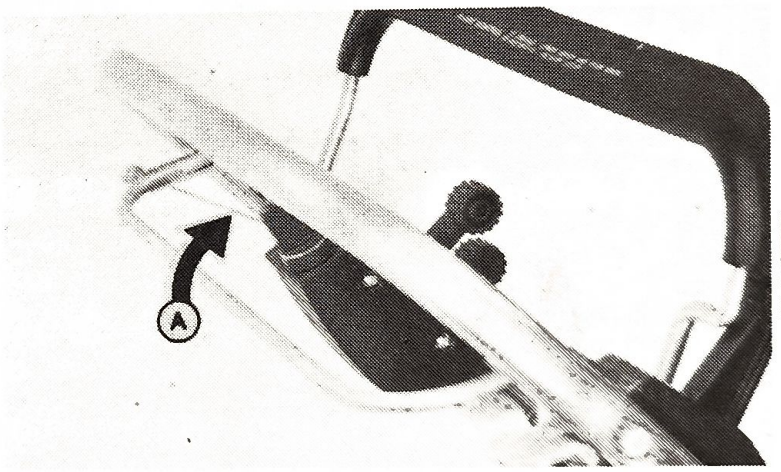
FORWARD TRAVEL OPERATION—SELF-PROPELLED MODELS

TO TRAVEL FORWARD: Pull lever (A) to handle and hold.

TO STOP FORWARD TRAVEL: Release lever.

Release lever before you turn.

NOTE: Rear wheels will make a clicking noise when you push mower forward. This means drivetrain is operating correctly.



M61454 -UN-01SEP88

MX,OPBV,H -19-10AUG88

TRAVEL SPEEDS

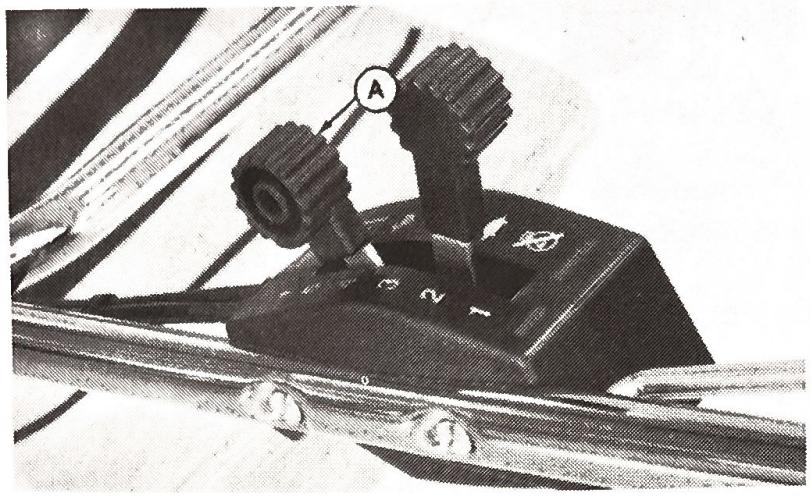
To change travel speeds while you mow:

1. STOP FORWARD TRAVEL. See FORWARD TRAVEL OPERATION in this section.

2. Move gear lever (A) to desired position.

3. ENGAGE traction clutch lever.

Gear	Travel Speed mph/(kmh)
1	1.2 (1.9)
2	1.9 (3.0)
3	2.4 (3.7)
4	2.9 (4.6)
5	4.1 (6.6)



M61455 -UN-13OCT88

MX,OPBV,I -19-10AUG88

MOWING TIPS

CAUTION: Before you remove bag or inspect or unplug mower:
—Stop mower.
—Stop blade.
—Stop engine.

Mow at full throttle.

Mow when grass is dry.

Lawn care professionals suggest you mow high and often.

If cut is uneven:
—LOOK: All cutting height levers must be adjusted to same height.
—CHECK: Blade may be dull.

Check blade hardware often. Keep blade sharp.

To mow tall grass: First method:
—First pass: Adjust cutting height to cut grass to half height.
—Second pass: Adjust cutting height for desired height.

To mow tall grass: Second method:
—Mow at desired height at slow travel speed, full width OR
—Mow at desired height, half width.

Slow down on rough ground.

Release propel lever before you turn.

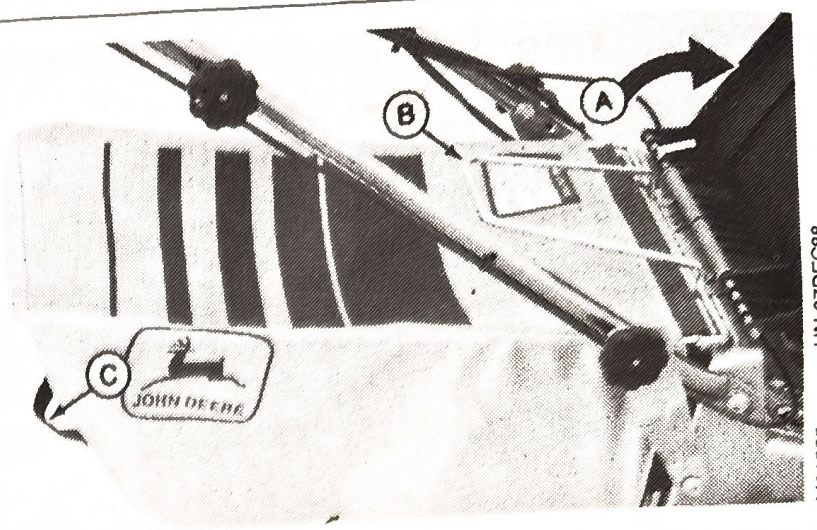
Use thatcher (available from John Deere dealer) in spring to pull up dead grass and areate ground.

After you mow:
1. Stop engine. Let it cool (to prevent fire when you store mower).
2. Remove and shake bag to remove all clippings (to prevent deterioration of bag and fire).
3. Clean top of deck, engine, and chute with compressed air, if possible (to prevent buildup and fire).
4. Clean under deck with water from garden hose (to prevent buildup for better performance).
5. Install bag.
6. Put mower in safe storage.
7. Fold handle down, if desired.
8. Remove key, if equipped.
9. Close fuel shutoff valve

MX,OPBV,J -19-10AUG88

USING GRASS BAG

CAUTION: Do not operate mower without grass bag or chute (optional). Before you empty bag, STOP MOWER, BLADE, AND ENGINE.



M61555 -UN-07DEC88

BRK:

1. Lift door (A).
2. Grasp handle (B). Lift bag off mower.
3. Grasp handle (C) to dump bag.

MX,OPBV,K -19-25MAY89

BAGGING TIPS

For best performance, bagger needs good airflow. To help increase airflow:
—Keep underside of deck and chute clean.
—Cut grass high.
—Mow at full throttle.
—Clean bag often with water from garden hose. Direct water from outside to inside of bag. Let bag dry before you use it.

Bag may wear and deteriorate. Check condition of bag frequently.

IMPORTANT: Do not leave clippings in bag:
—Moisture may damage bag.
—Damp clippings are fire hazard.

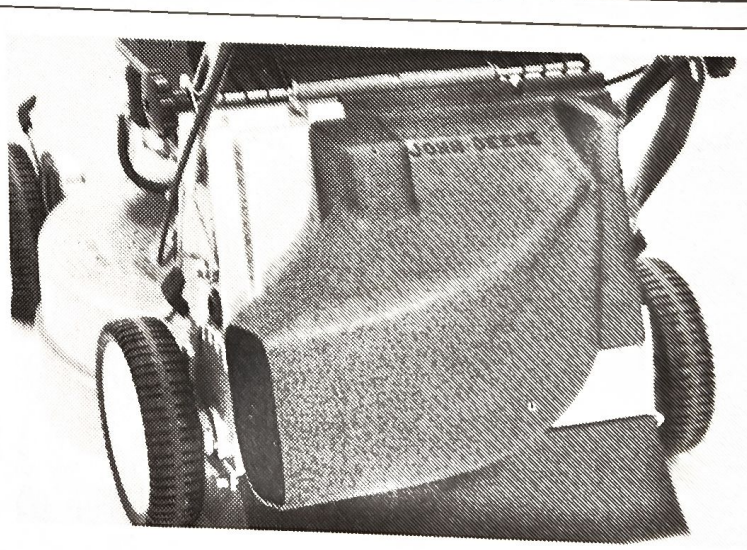
LOOK: Check level of clippings in bag often. When bag is full:
—Mower may leave a trail of clippings.
—Clippings may blow to side.
—Top of bag will deflate.

MX,OPBV,L -19-25MAY89

SIDE-DISCHARGE CHUTE—OPTIONAL

CAUTION: Do not operate mower without grass bag or chute.

1. Lift door.
2. Remove grass bag.
3. Install chute.



M61527 -UN-19OCT88

MX,OPBV,M1 -19-25MAY89

120789

4. Lower door to hold chute in place during operation.

M61833 -UN-19OCT88

MX,OPBV,M2 -19-25MAY89

FOLDING AND UNFOLDING HANDLE

To fold handle:

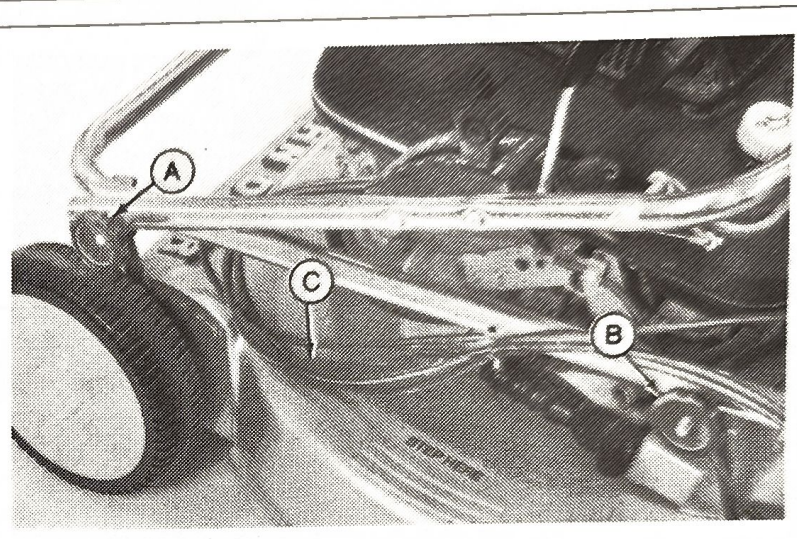
1. Remove grass bag.

2. Loosen knob (A) 1 in. (25 mm) on each side. Leave bolt heads against handle. Do not push them in.

3. Remove knob and bolt (B) from each side.

4. Fold handle down carefully and guide cables (C) inside lower handle. Do not crimp cables.

5. Install knobs and bolts in handle.



M61456 -UN-06OCT88

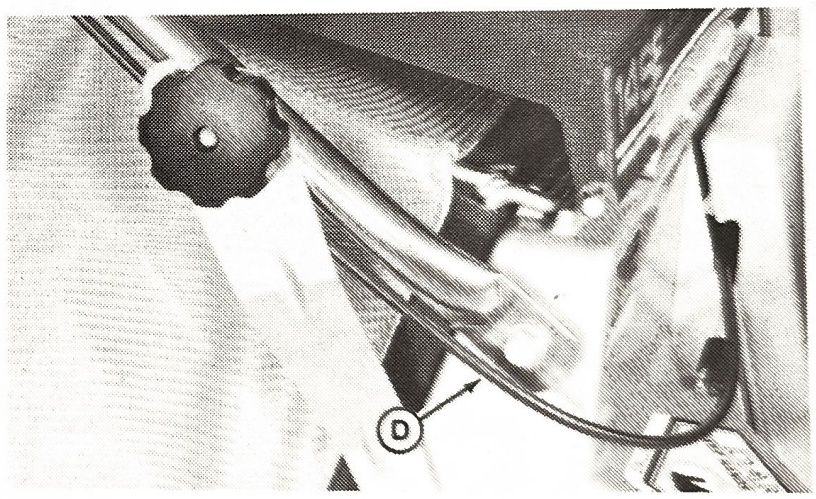
To unfold handle:

1. Check cables for kinks or other damage.

IMPORTANT: On right side INSTALL CABLE INSIDE BRACKET where it cannot catch on objects when you mow and be damaged.

2. Remove bolt and knob (B). Install bolt through bracket and handle on each side. On right side, put cable (D) INSIDE BRACKET: between bracket and mower deck. Put knob on each bolt.

3. Straighten handle. Tighten knob (A) on each side.



M61557 -UN-07DEC88

MX,OPBV,N -19-10AUG88

120789

TRANSPORTING MOWER

IMPORTANT: Close fuel shutoff valve before you transport mower. Carburetor float may vibrate during transport and let fuel flow into engine: engine will be hard to start.

MX,OPBV,O -19-08JUN89

Fuels and Lubricants

HANDLING FUEL AND OIL

CAUTION: Avoid fires:
—Use approved containers.
—Fill fuel tank outdoors.
—Avoid spilling fuel.
—Wipe spilled fuel.
—Do not fill tank to top: allow room for fuel to expand.
—Do not smoke.
—Move mower away from fueling area before you start engine.

Use only clean oil and fuel:
—To prevent engine damage.
—So engine can operate efficiently.

Use clean, approved containers and funnels.

Store oil and fuel in area protected from dust, moisture, and other contamination.

Close fuel shutoff valve.

MX,FLBV,A -19-25MAY89

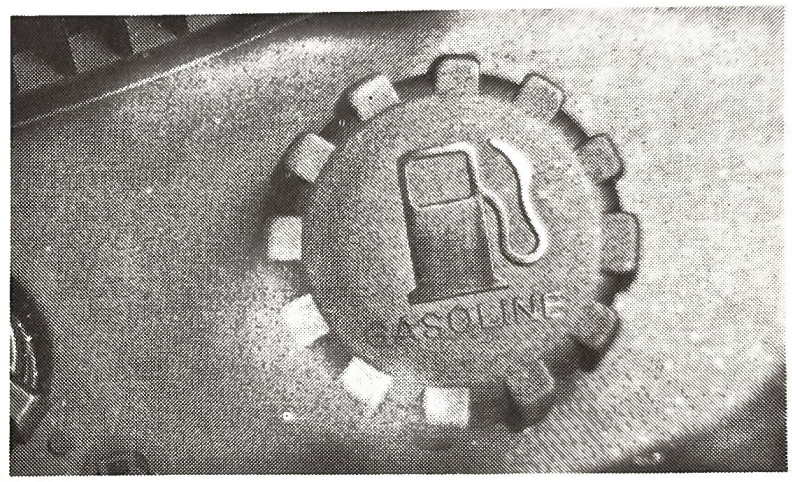
4-CYCLE ENGINE FUEL

Use clean, fresh regular or unleaded gasoline.

Gasohol with no more than 10% ethyl alcohol may be used.

Gasoline with no more than 3% methanol can be used but is not recommended.

Do not use gasoline left over from previous mowing season.



M61528 -UN-01SEP88

MX,FLBV,B -19-10AUG88

4-CYCLE ENGINE OIL

John Deere PLUS-4 engine oil is recommended. PLUS-4 is available in 10W-30 and 10W-40 weights.

Other oils may be used if they meet the requirements of API Service Classification SF or SE.

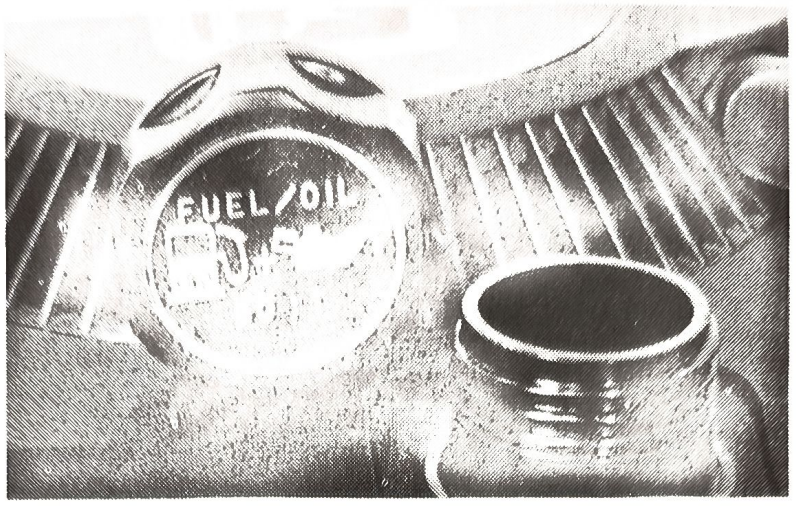
TEMPERATURE RANGE

SAE 5W30	-33 to +50° F (-35 to +10°C)
SAE 10W	-4 to +50°F (-20 to +10°C)
SAE 10W30	-4 to +86°F (-20 to 30°C)
SAE 10W40	-4 to +104°F (-20 to +40°C)
SAE 30	32 to +122°F (0 to +50°C)

MX,FLBV,E -19-05DEC88

120789

2-CYCLE ENGINE FUEL



IMPORTANT: Use correct gasoline:
—Leaded or unleaded.
—Not gasohol or alcohol blends.
—Not fuel stored long time.

John Deere 2-Cycle Engine Oil, 50:1 mix is recommended. (Not available in Canada.) This oil contains stabilizer to prevent varnish in fuel system.

Also approved:
—2-Cycle oils containing ashless-type additives AND
—Certified by BIA for Service TC-W.

CAUTION: Mix fuel safely:
—Use approved container.
—Do not mix fuel in mower fuel tank.
—Mix fuel outdoors.

IMPORTANT: Use only 50:1 fuel-oil mixture:
—1 gal (3.8 L) gas and 2.3 oz (60 mL) oil
OR
—1 Imperial gal (4.5 L) gas and 2.5 oz (74 mL) oil.

To mix fuel and oil:
—Fill container half full of gasoline.
—Add all oil. Fasten lid.
—Shake mixture.
—Add rest of gasoline.
—Shake again.
—Loosen cap to release pressure. Tighten cap.

MX,FLBV,D -19-25MAY89

GREASE

John Deere Moly High Temperature EP Grease and John Deere High Temperature EP Grease are recommended.

Other greases that may be used are:
—SAE Multipurpose EP Grease with 3 to 5% molybdenum disulfide.
—SAE Multipurpose EP Grease.

MX,FLBV,E -19-25MAY89

Troubleshooting

PROBLEM	SOLUTION	SECTION
ENGINE WILL NOT START.	Open fuel shutoff valve.	Operation
	Fill fuel tank.	Fuels
	Use correct fuel.	Fuels
	Use fresh fuel.	Fuels
	Spark plug:	Service
	—Connect wire.	
	—Clean and gap or replace.	Service
	Electric start model: Connect battery.	Operation
	Move throttle lever to correct position.	—
ENGINE STARTS HARD OR LOSES POWER.	Drain and clean fuel tank.	Fuels
	Fill tank with fresh fuel.	Service
	Clean fuel cap vent.	Service
	Clean or replace air cleaner element(s).	Service
	Spark plug:	
	—Connect wire.	
	—Clean and gap or replace.	Service
ENGINE RUNS ROUGH.	Adjust carburetor.	Service
	Spark plug:	
	—Connect wire.	
	—Clean and gap or replace.	Operation
	Move throttle lever from CHOKE to FAST.	Service
	Clean cooling fins.	Service
	Clean or replace air cleaner element(s).	
ENGINE OVERHEATS.	Clean blower housing and cooling fins.	Service
ENGINE VIBRATES TOO MUCH.	Tighten blade cap screws.	Service
	Sharpen and balance blade.	Service
MOWER MOWS UNEVENLY.	Walk slower or adjust travel speed.	Operation
	Travel slower around corners.	Operation
	Change mowing pattern.	Operation
	Adjust all wheel levers to same position.	Operation
	Sharpen and balance blade.	Service
DISCHARGE CHUTE PLUGS.	Let grass dry.	Operation
	Raise cutting height.	Operation
	First pass: cut half of grass height.	Operation
	Second pass: cut at desired height	
	Empty grass bag.	Operation
	Travel slower.	Operation
	Run engine at full throttle.	Operation
	Wash grass bag.	Operation

PROBLEM	SOLUTION	SECTION
MOWER PUSHES OR PULLS HARD.	Lubricate rear axle. Adjust traction clutch.	Service Service
MOWER JERKS OR WILL NOT SELF-PROPEL	Adjust traction clutch. Clean debris from top of transmission. Move gear shift lever slightly forward or back.	Service Service Operation

MX,TSBV,B -19-10AUG88

SERVICE INTERVALS

BEFORE USE

—Check oil level

FIRST 5 HOURS

—Change 4-cycle engine oil and filter, if equipped.

25 HOURS

—Clean air cleaner elements.
—Tighten blade hardware
—Change 4-cycle engine oil.
—Lubricate rear axle bearings.
—Clean and gap spark plug.
—Clean top of transmission.

50 HOURS

—Change oil filter (optional).
—Adjust traction clutch.

100 HOURS

—Adjust blade brake clutch.

AS NECESSARY

—Check belt area.
—Clean fins.
—Adjust throttle cable: 2-cycle engine.
—Adjust choke: 4-cycle engine.
—Adjust slow idle: 4-cycle engine.
—Charge battery: Model 14SE
—Check and remove blade.
—Sharpen blade.
—Balance and install blade.
—Clean fuel cap vent: 4-cycle engine.
—Clean fuel cap vent: 2-cycle engine.

MX,SEBV,A -19-25MAY89

CHECKING OIL LEVEL—4-CYCLE—BEFORE USE

IMPORTANT: Change oil (and filter, if equipped) after first 5 hours of operation.

CAUTION: Before you check or add oil:
—STOP engine.
—Let it cool.

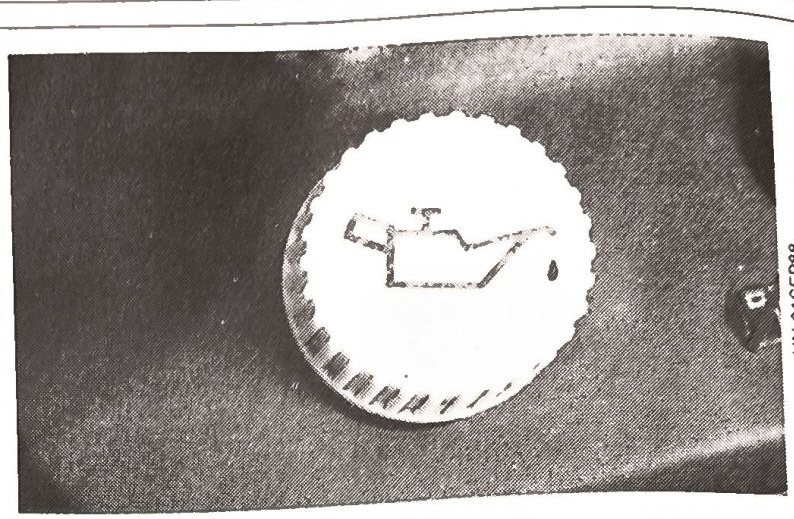
1. Stop engine. Put mower on level surface.

2. Remove dipstick. Wipe it.

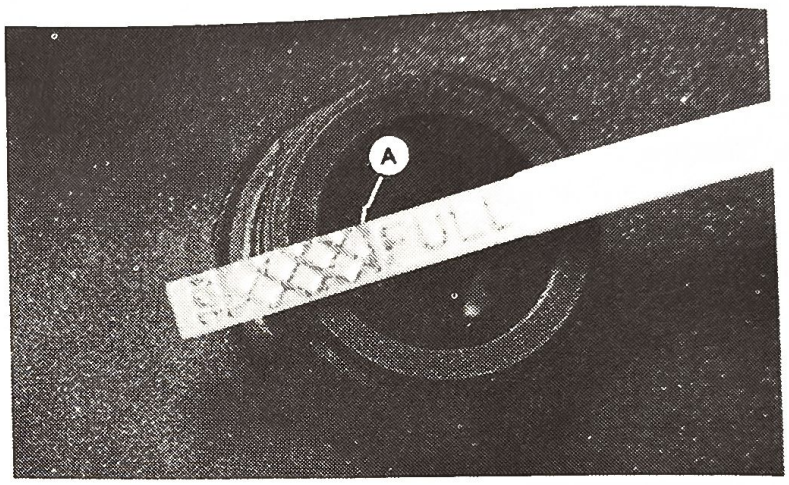
3. Install dipstick. DO NOT TIGHTEN IT: LET THREADS REST ON TOP OF TUBE.

4. Add oil to bring level to FULL mark (A). See 4-CYCLE ENGINE OIL in Fuels and Lubricants section for correct oil.

5. Install and tighten dipstick.



M61458 -UN-01SEP88



M61459 -UN-20JUN89

MX,SEBV,A1 -19-10AUG88

CLEANING AIR CLEANER ELEMENTS—25 HOURS

NOTE: If you operate mower in dusty conditions, clean elements more often.

CAUTION: Before you remove elements:
—Stop engine.
—Let it cool.

IMPORTANT: Do not run engine without elements. If either element is damaged, replace it.

To clean foam element:

1. Remove cover (A).

2. Remove foam element (B) from paper element (C)

3. Wash foam element in non-flammable solvent or warm water-detergent solution. Rinse element. Let it dry.

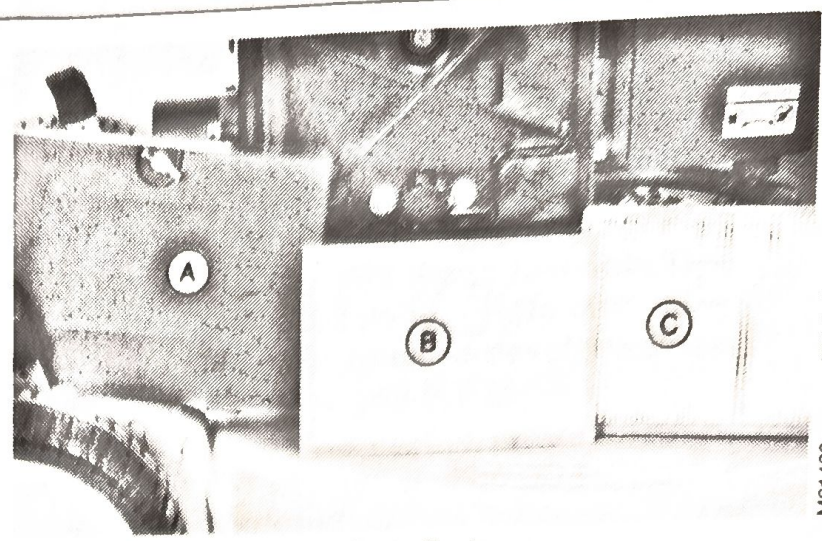
IMPORTANT: Do not oil 2-cycle engine element.

4. 4-cycle engine element: Put 10—15 drops clean engine oil on element. Squeeze element to distribute oil.

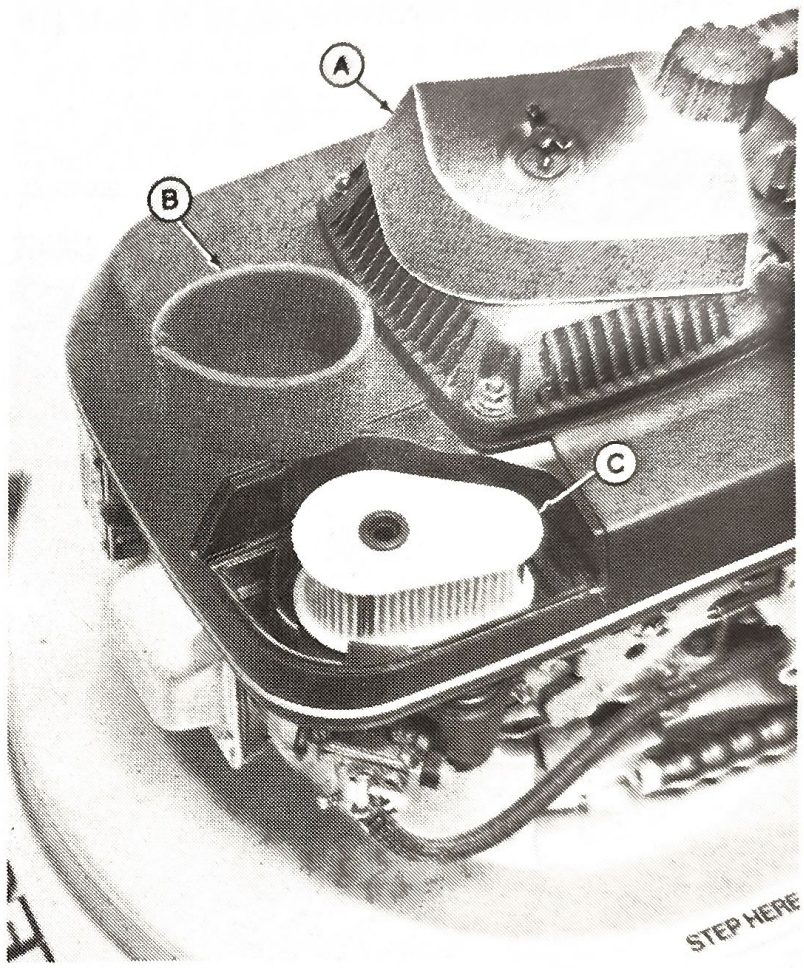
To clean paper element:

1. Use one or more of following ways of cleaning:
—Dust element: Tap element on hard surface to loosen and remove dust.
—Use compressed air under 30 psi (210 kPa). Direct air along pleats from inside to outside of element.
—Wash element in warm water-detergent solution. Rinse element. Let it dry.

2. Install elements and cover.



2-Cycle Engine



4-Cycle Engine

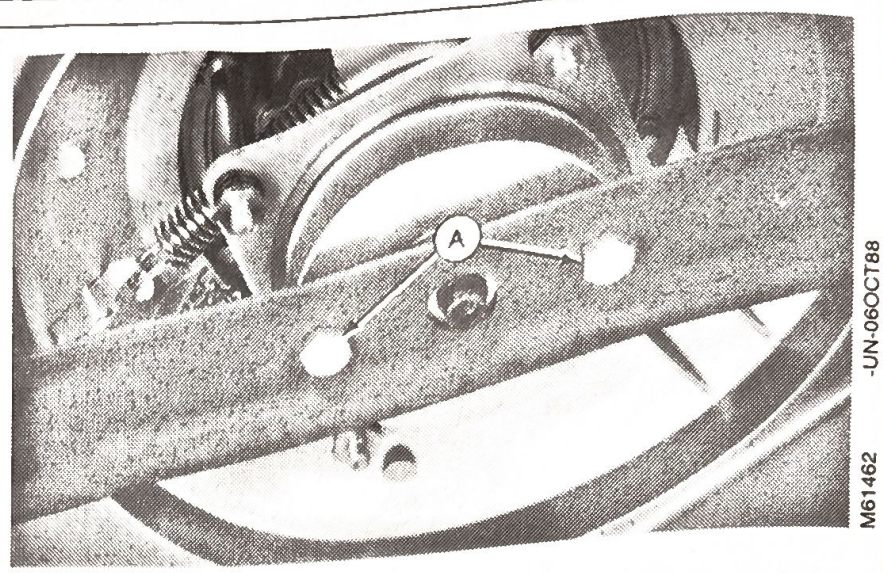
MX,SEBV,B -19-10AUG88

TIGHTENING BLADE HARDWARE—25 HOURS

CAUTION: Service mower safely:
—Stop engine. Let it cool.
—Disconnect spark plug wire.
—Electric start model: disconnect battery.
—Wear gloves or wrap blade with rag.

IMPORTANT: Do not turn mower on left side:
—Oil or fuel mixture will run into air cleaner and carburetor.
—Air cleaner will be damaged.
—Engine will be hard to start.

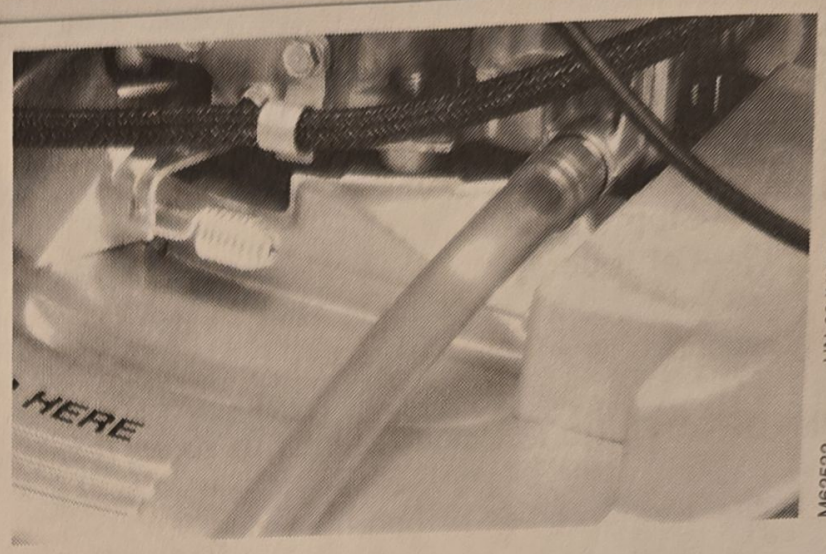
IMPORTANT: Tighten hardware (A) to 55 lb-ft (75 N·m).



M61462 -UN-06OCT88

MX,SEBV,C -19-10AUG88

CHANGING 4-CYCLE ENGINE OIL—25 HOURS



M62532 -UN-20JUN89

NOTE: Oil filter kit for 4-cycle engine is available at John Deere dealer. If you install kit, change oil every 50 hours.

IMPORTANT: Change oil after first 5 hours of operation. If you do not run mower 25 hours during mowing season, change oil before you store mower.

1. Install drain hose shown (included with mower) on oil drain fitting.

IMPORTANT: Do not overtighten drain fitting or you may damage it.

2. Turn fitting counterclockwise to open drain. Drain oil into container. Tighten fitting. Remove hose.

3. Add 1-1/4 pt (0.6 L) oil through dipstick tube. See 4-CYCLE ENGINE OIL in Fuels and Lubricants section for correct oil 20 oz.

4. Install dipstick. DO NOT TIGHTEN IT: LET THREADS REST ON TOP OF TUBE.

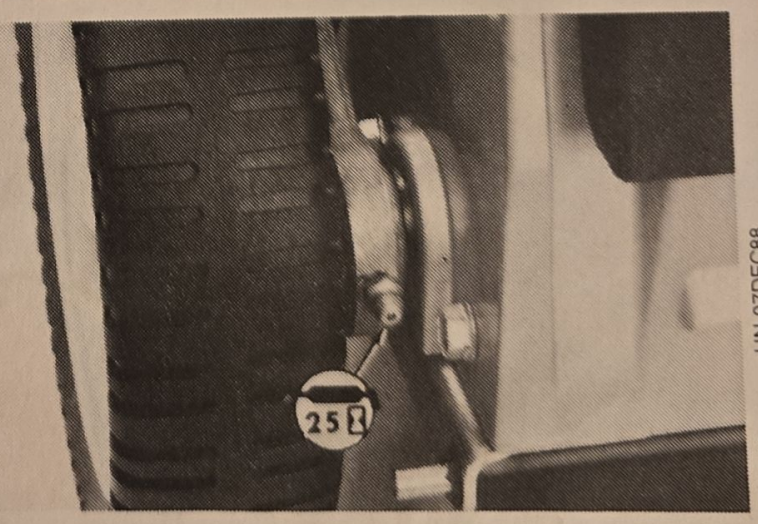
5. Check oil level. If necessary, add oil to bring level to FULL MARK.

6. Install and tighten dipstick.

MX,SEBV,D -19-08JUN89

LUBRICATING REAR AXLE BEARINGS—25 HOURS

Lubricate bearings with one shot of John Deere Multipurpose Grease or equivalent.



M61549 -UN-07DEC88

MX,SEBV,D1 -19-10AUG88

CLEANING AND GAPPING SPARK PLUG—ALL MODELS—25 HOURS

CAUTION: Before you remove plug:
—Stop engine.
—Let it cool.

1. Disconnect spark plug wire. Remove plug.

IMPORTANT: Do not clean plug with abrasives.

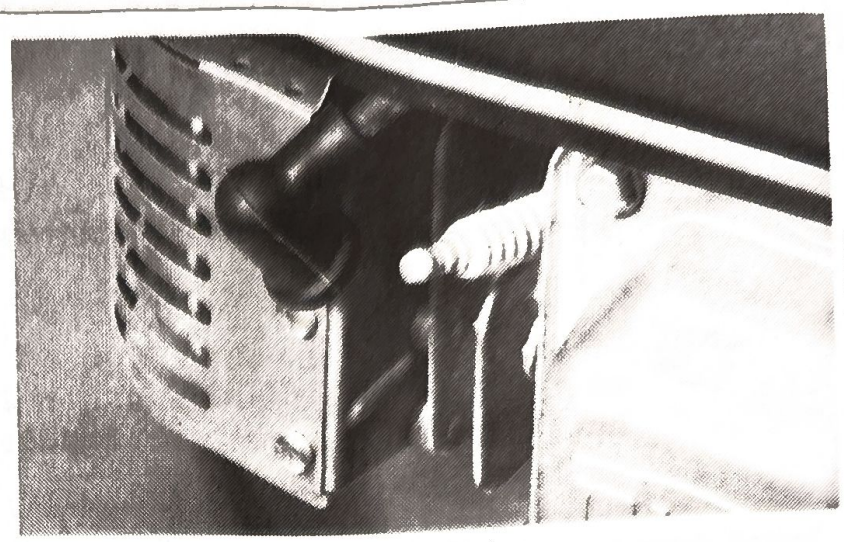
2. Carefully wire brush carbon from plug.

3. Inspect plug for damage. Replace damaged plug.

4. Adjust gap: 0.030 in. (0.76 mm).

5. Install and tighten plug to 15 lb-ft (20 N·m)

6. Connect wire to plug.



M61522 -UN-01SEP88

4-Cycle Engine

MX,SEBV,E -19-10AUG88

CLEANING TOP OF TRANSMISSION—MODELS 12SB, 14SB, AND 14SE—25 HOURS

CAUTION: Before you remove shield:
—Stop engine.
—Let it cool.

1. Remove belt shield. See ADJUSTING TRACTION CLUTCH in this section.

2. Check top of transmission for buildup of clippings or debris.

3. Use a brush or compressed air to remove buildup.

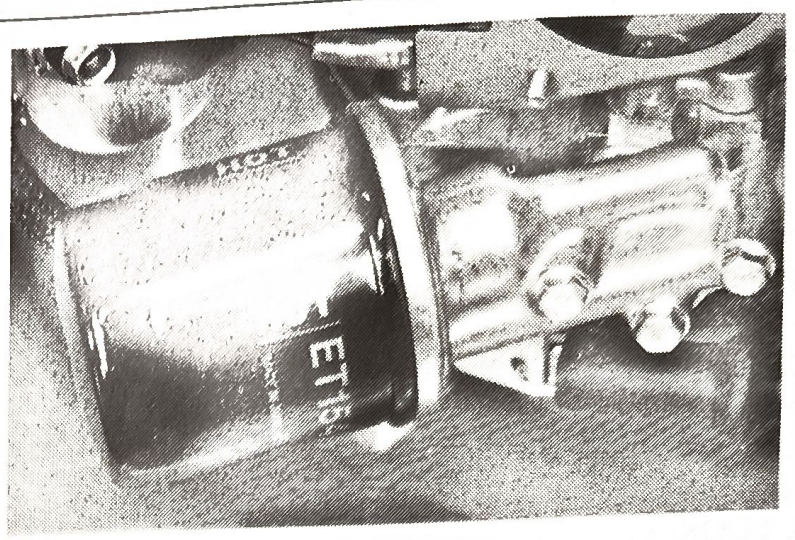
4. Install shield.

MX,SEBV,E2 -19-17OCT88

CHANGING OIL FILTER (OPTIONAL)—4-CYCLE ENGINE—50 HOURS

IMPORTANT: Change oil and filter after first 5 hours of operation. After that, change filter every 50 hours or yearly, whichever comes first.

CAUTION: Before you remove filter:
—Stop engine.
—Let it cool.



M61553 -UN-07DEC88

1. Drain Oil. See CHANGING ENGINE OIL in this section. Remove filter: turn it counterclockwise.

2. Apply film of clean engine oil to new filter gasket.

3. Install filter:
—Turn filter clockwise until gasket contacts filter base.
—Tighten filter with hands about 3/4 turn.

4. Add oil. See CHANGING ENGINE OIL. Run engine 3 minutes. Check for leaks around filter.

5. Stop engine. Check oil level. See CHECKING OIL LEVEL in this section.

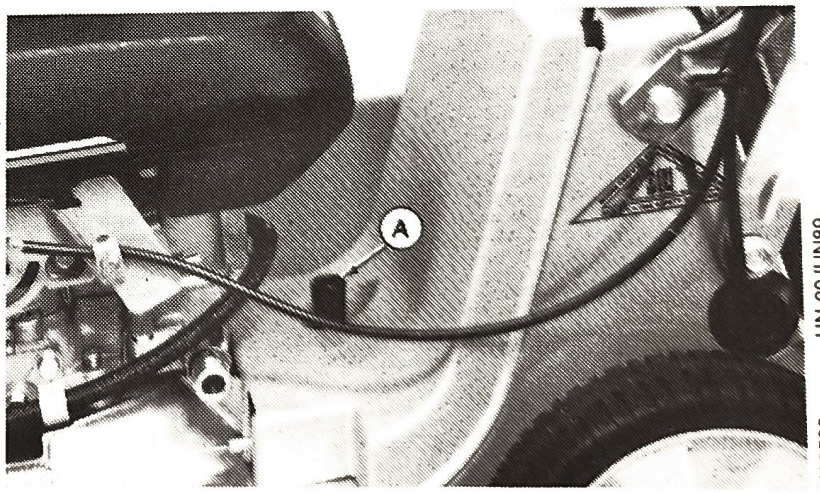
6. Install and tighten dipstick.

MX,SEBV,E1 -19-26MAY89

ADJUSTING TRACTION CLUTCH—SELF-PROPELLED UNITS—50 HOURS OR AS NECESSARY

Adjust clutch before 50 hours if mower slows as it goes uphill.

CAUTION: Do not operate mower without belt shield. Before you adjust clutch:
—Stop engine.
—Let it cool.
—Keep people and pets away from mower.
—Keep away from belt area when engine is running.



M62533 -UN-20JUN89

1. Remove knob (A) and shield.

MX,SEBV,F -19-08JUN89

120789

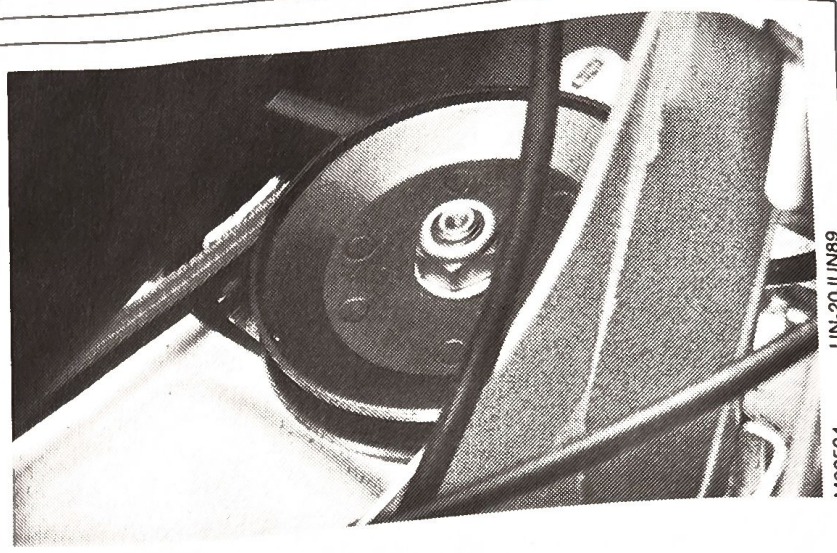
CHECKING BELT AREA—MODELS 12SB, 14SB, AND 14SE—AS NECESSARY

CAUTION: Before you remove shield:
—Stop engine.
—Let it cool.

1. Remove belt shield. See ADJUSTING TRACTION CLUTCH in this section.

2. Remove grass buildup from belt area shown, and especially from transmission area.

3. Install shield.



M62534 -UN-20JUN89

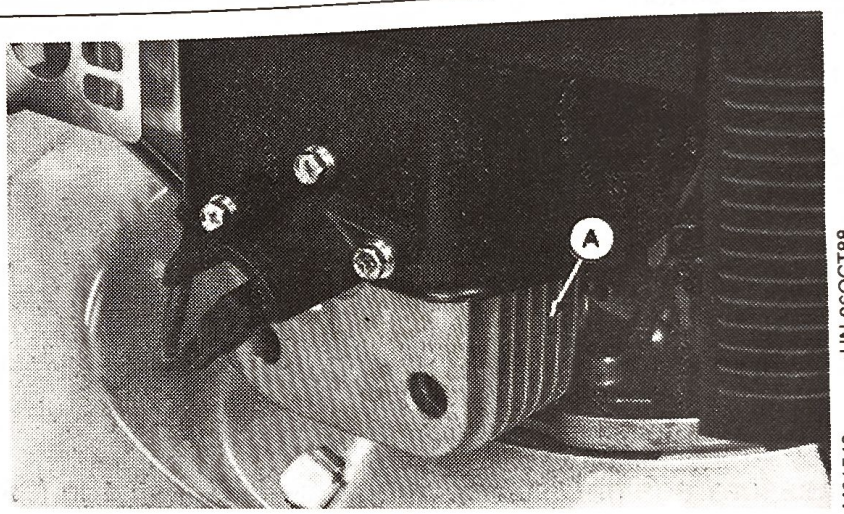
MX,SEBV,H1 -19-08JUN89

CLEANING FINS—AS NECESSARY

IMPORTANT: Keep fins clean or engine may overheat.

Clean fins with brush, rag, or compressed air.

Blow compressed air under shroud.



M61548 -UN-06OCT88

2-Cycle Engine

MX,SEBV,H2 -19-10AUG88

ADJUSTING THROTTLE CABLE—2-CYCLE ENGINE—AS NECESSARY

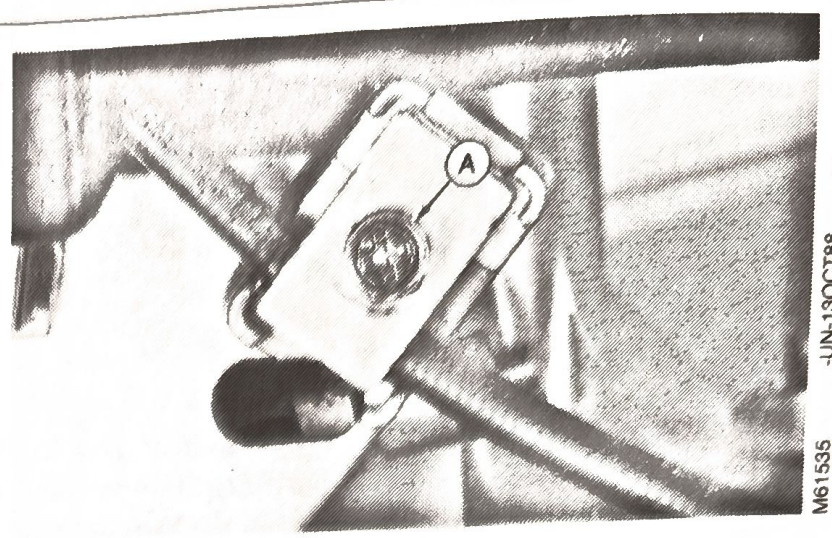
1. Move throttle lever to FAST position.

2. Loosen screw (A).

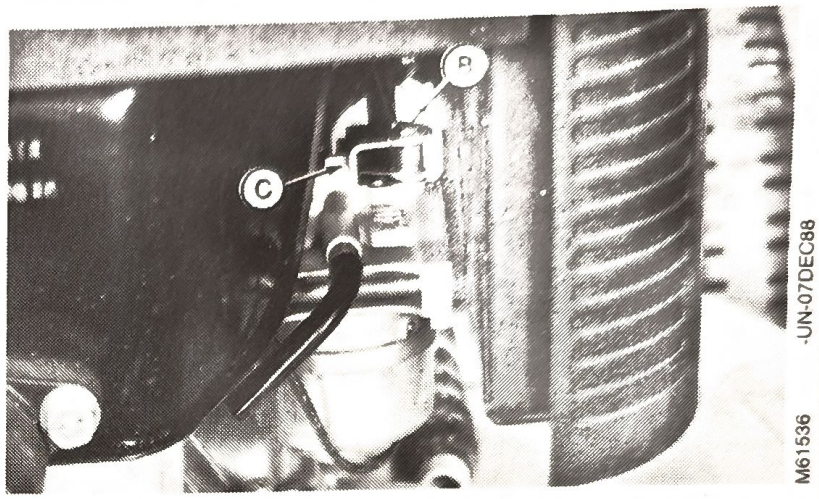
3. Hold choke plate (B). Move cable in clamp to take up slack in linkage.

4. Tighten screw.

5. CHECK:
—Put throttle lever in FAST position: tab (C) should point to right of mower.
—Put throttle lever in CHOKE position: tab should point to front.



M61535 -UN-13OCT88



M61536 -UN-07DEC88

MX,SEBV,I -19-26MAY89

ADJUSTING THROTTLE CABLE—4-CYCLE ENGINE—AS NECESSARY

IMPORTANT: Do not move screws (A) or you will change governor adjustment.

CHECK:
—Move throttle lever to FAST (rabbit) position.
—LOOK: Hole (D) in lever should be in line with hole in bracket.

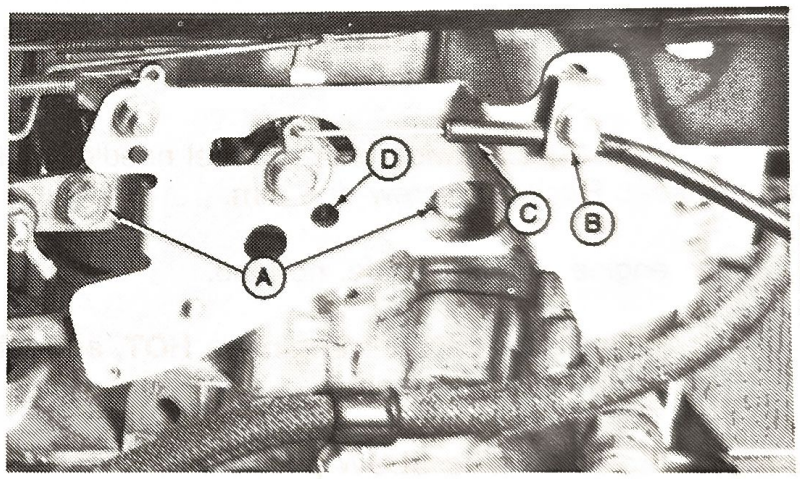
To adjust cable:

1. Move throttle lever to FAST position.

2. Loosen screw (B).

3. Move cable cover (C) until holes (D) are in line.

4. Tighten screw.



M61465 -UN-01SEP88

A—Screws
B—Screw
C—Cable Cover
D—Hole

MX,SEBV,K -19-26MAY89

120789

ADJUSTING CHOKE—4-CYCLE ENGINE—AS NECESSARY

IMPORTANT: Do not move screws (A) or you will change governor adjustment.

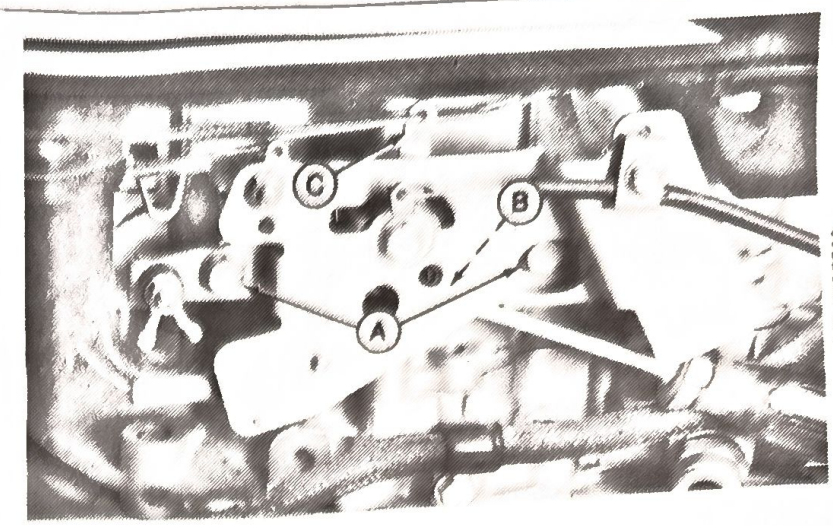
1. Adjust throttle cable. See ADJUSTING THROTTLE CABLE in this section.

2. Turn screw (B) clockwise until lever (C) begins to move. If lever moves when you first turn screw, back off screw and start step 2 again.

3. Move throttle lever to CHOKE position.

4. Move lever (C). There should be no free play.

5. If necessary, repeat step 2.



M61466 -UN-01SEP88

MX,SEBV,L -19-26MAY89

ADJUSTING SLOW IDLE—4-CYCLE ENGINE—AS NECESSARY

1. Turn screw (A) clockwise until you feel needle lightly contact seat. Back out screw one turn.

2. Warm engine at half-throttle, no load.

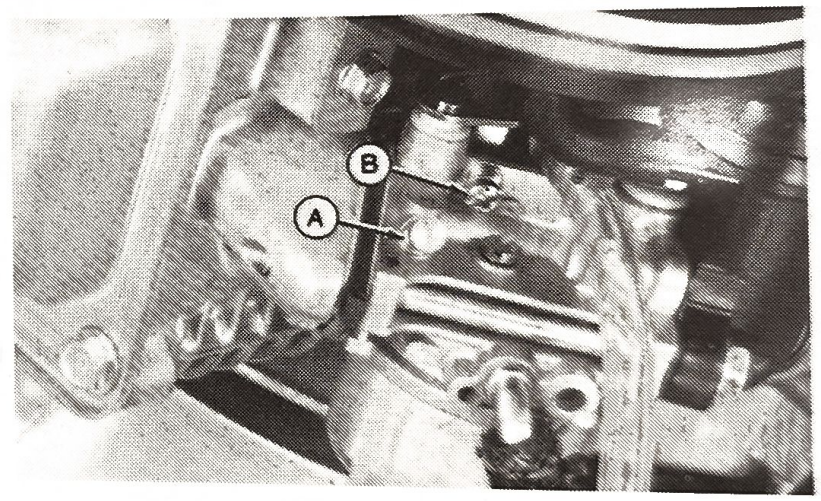
CAUTION: Be careful: Engine is HOT, and will burn you if you touch it.

3. Move throttle lever to SLOW position.

4. Adjust screw (B) until engine runs smoothly.

5. Adjust screw (A) to get maximum rpm. Back screw out 1/4 turn.

6. Adjust screw (B) until engine runs smoothly.



M61470 -UN-13OCT88

MX,SEBV,M -19-26MAY89

120789

CHARGING BATTERY—MODEL 14SE—AS NECESSARY

IMPORTANT: Use only charger supplied with mower. Other chargers may permanently damage battery.

1. Disconnect battery wire connector (A) from engine wire connector (B).

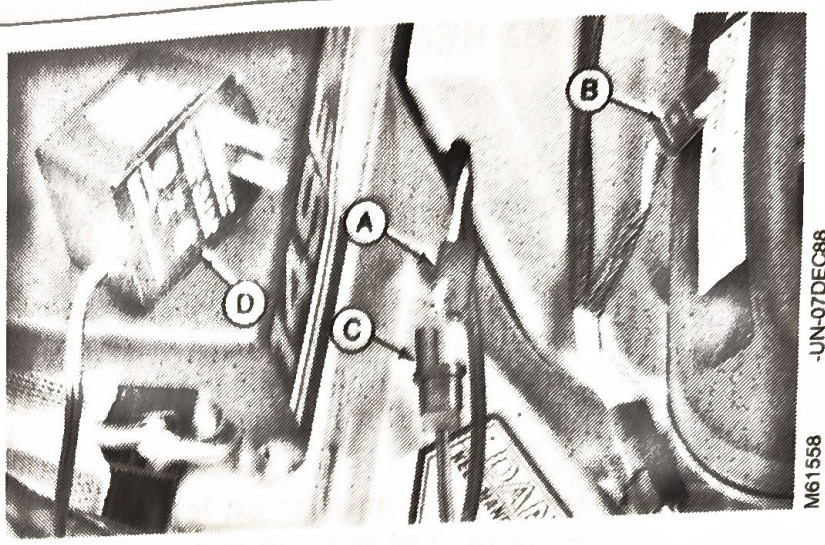
2. Connect charger cord connector (C) to battery wire connector.

3. Plug charger (D) into 115-volt house receptacle.

4. For new or discharged battery: Charge battery 24—36 hours.

5. Unplug cord from house receptacle, then from battery.

6. Connect battery wire connector to engine wire connector.

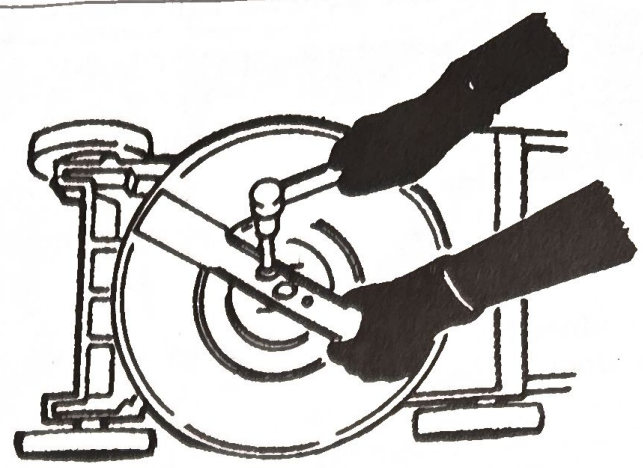


M61558 -UN-07DEC88

MX,SEBV,N -19-26MAY89

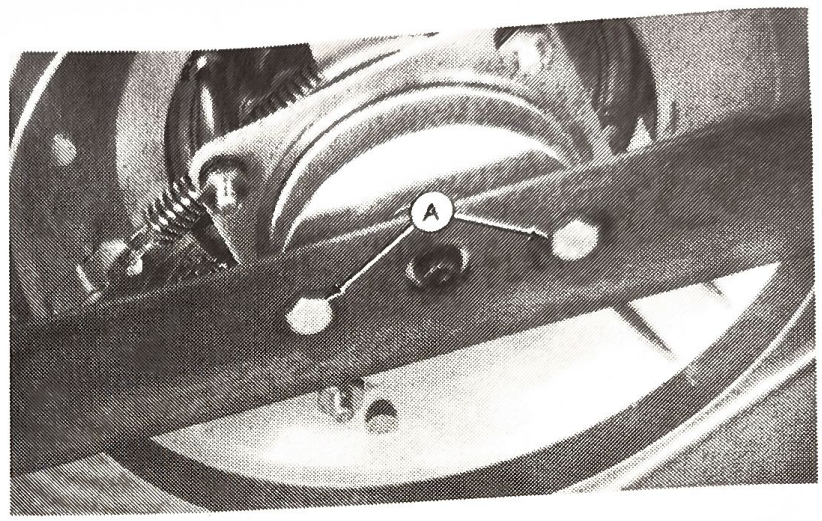
CHECKING AND REMOVING BLADE—AS NECESSARY

CAUTION: Service mower safely:
—Check or remove blade when fuel tank is almost empty.
—Stop engine. Let it cool.
—Disconnect spark plug wire.
—Electric start model: disconnect battery.
—Wear gloves or wrap blade with rag.



M61532 -UN-01SEP88

IMPORTANT: Do not turn mower on left side:
—Oil or fuel mixture will run into air cleaner and carburetor.
—Air cleaner will be damaged.
—Engine will be hard to start.



M61462 -UN-06OCT88

To check blade:

1. Turn mower on right side.

2. Check blade for damage and sharpness:
—Replace damaged blade.
—Sharpen dull blade. See SHARPENING BLADE in this section.

To remove blade:

1. Turn screws (A) counterclockwise. Remove screws.

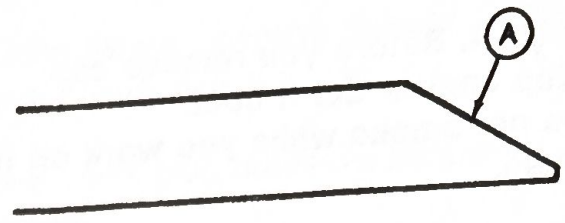
2. Remove blade. Note position of blade: Wing (bend) should be toward deck.

3. Clean and inspect blade. Replace damaged blade.

MX,SEBV,P -19-10AUG88

SHARPENING BLADE—AS NECESSARY

CAUTION: Wear gloves when you handle blade.



M61830 -UN-19OCT88

1. Sharpen blade: Keep original bevel (A).

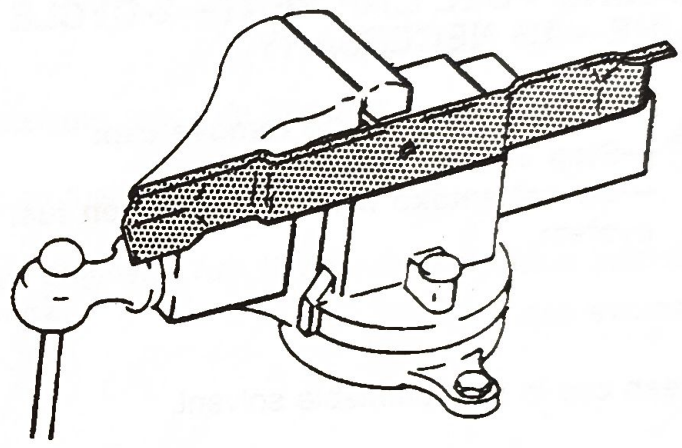
IMPORTANT: Balance blade after you sharpen it. Unbalanced blade may cause excessive vibration.

2. Balance blade. See BALANCING AND INSTALLING BLADE in this section.

MX,SEBV,Q -19-26MAY89

BALANCING AND INSTALLING BLADE—AS NECESSARY

CAUTION: Wear gloves when you handle blade.



M61524 -UN-01SEP88

1. Clean blade.

2. Put blade on nail in vise or wall. Heavy end of blade will drop. Grind bevel of heavy end. Do not change bevel.

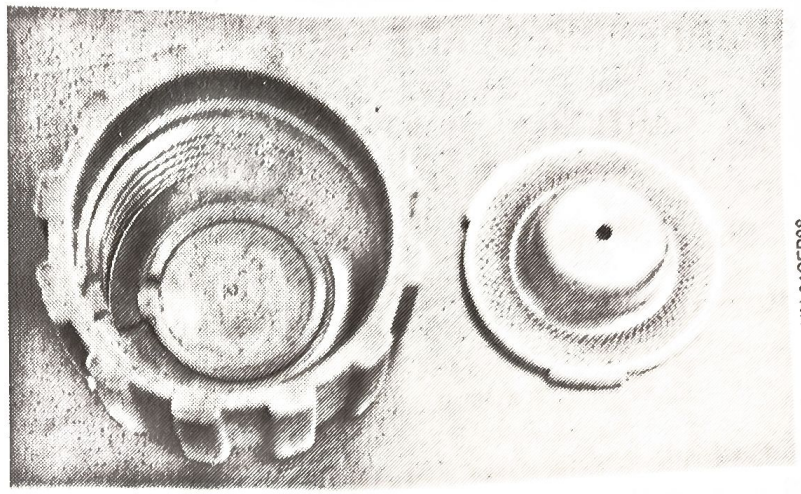
3. Install blade and screws. Tighten screws to 55 lb-ft (75 N·m).

MX,SEBV,R -19-10AUG88

CLEANING FUEL CAP VENT—4-CYCLE ENGINE—AS NECESSARY

CAUTION: Before you remove cap:
—Stop engine. Let it cool.
—Do not smoke while you work on fuel system.

1. Remove cap.
2. Remove rubber vent from cap.
3. Clean cap and vent in nonflammable solvent.
4. Install vent and cap.



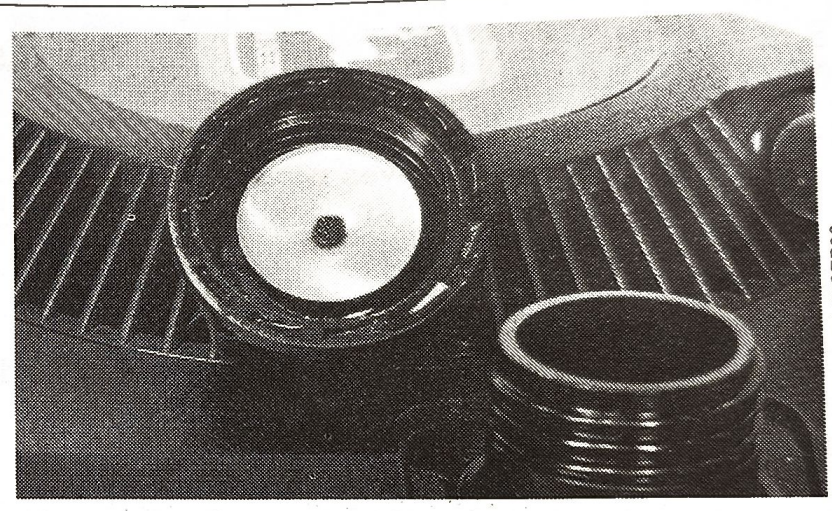
M61468 -UN-01SEP88

MX,SEBV,S -19-10AUG88

CLEANING FUEL CAP VENT—2-CYCLE ENGINE—AS NECESSARY

CAUTION: Before you remove cap:
—Stop engine. Let it cool.
—Do not smoke while you work on fuel system.

1. Remove cap.
2. Clean cap in nonflammable solvent.
3. Install cap.



M61475 -UN-01SEP88

MX,SEBV,T -19-10AUG88

Storage

STORING MOWER

CAUTION: Fuel is highly flammable. Do not smoke while you service fuel system. Wipe up spilled fuel immediately.

IMPORTANT: Use gasoline stabilizer: It helps prevent varnishing and plugging of carburetor jets. Either of these could cause engine to run lean, and result in piston seizure and engine failure. Follow directions on stabilizer can.

1. Use John Deere Gasoline Storage Stabilizer or equivalent. Follow directions on can.

2. Replace spark plug but leave plug wire disconnected.

3. Lubricate rear axle bearings.

4. Fold handle down, if desired. See FOLDING HANDLE in Operation section.

5. Close fuel shutoff valve.

MX,STBV,A -19-10AUG88

REMOVING FROM STORAGE

1. Unfold and tighten handle.

2. Fill fuel tank with fresh fuel-oil mixture or fresh gasoline. See Fuels and Lubricants section for correct fuel.

3. Check 4-cycle engine oil level.

4. Inspect mower:
—Shields and safety devices must be fastened in place and in good condition.
—Hardware must be tight: none missing.

5. Lubricate rear axle bearings.

6. Open fuel shutoff valve.

7. Run engine at half throttle 2—3 minutes before you mow.

MX,STBV,B -19-10AUG88

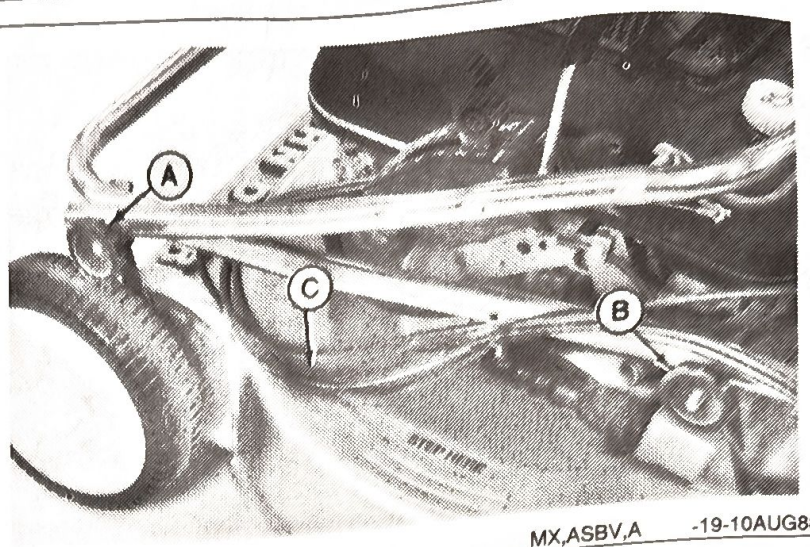
Assembly

REMOVE HANDLE HARDWARE

1. Loosen knob (A) on each side.

2. Remove knob (B) and bolt from each side.

3. Cables (C) should be inside handle.



M61456 -UN-06OCT88

MX,ASBV,A -19-10AUG88

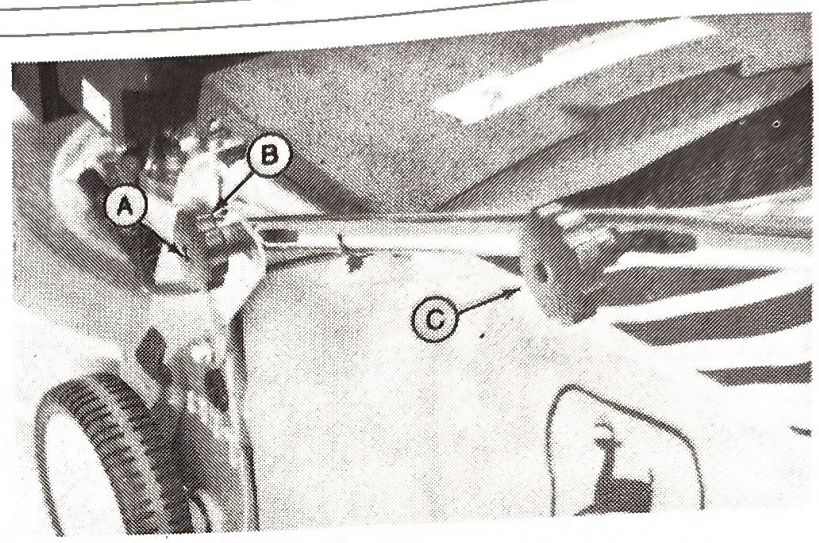
UNFOLD HANDLE

IMPORTANT: On right side INSTALL CABLE INSIDE BRACKET where it cannot catch on objects when you mow and be damaged.

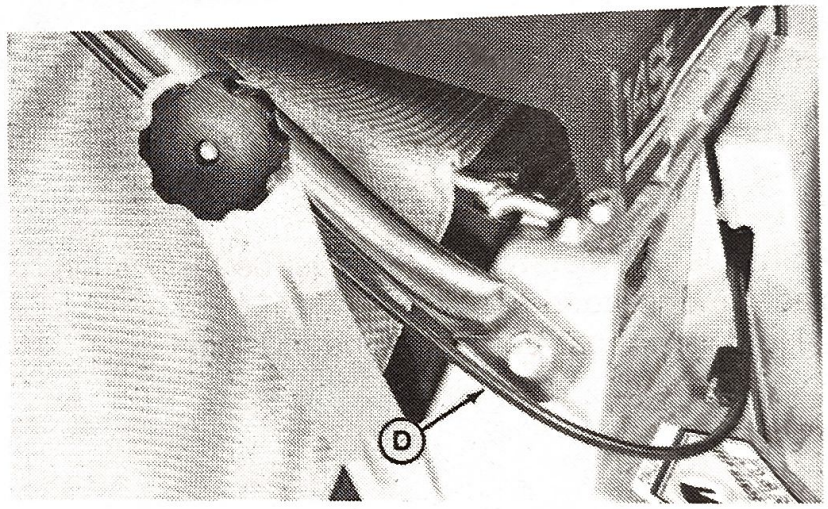
1. Install bolt (A) through bracket and handle on each side. On right side install cable (D) INSIDE BRACKET: between bracket and mower deck.

2. Install knob (B) on each bolt.

3. Hold handle in straight position and tighten knob (C) on each side.



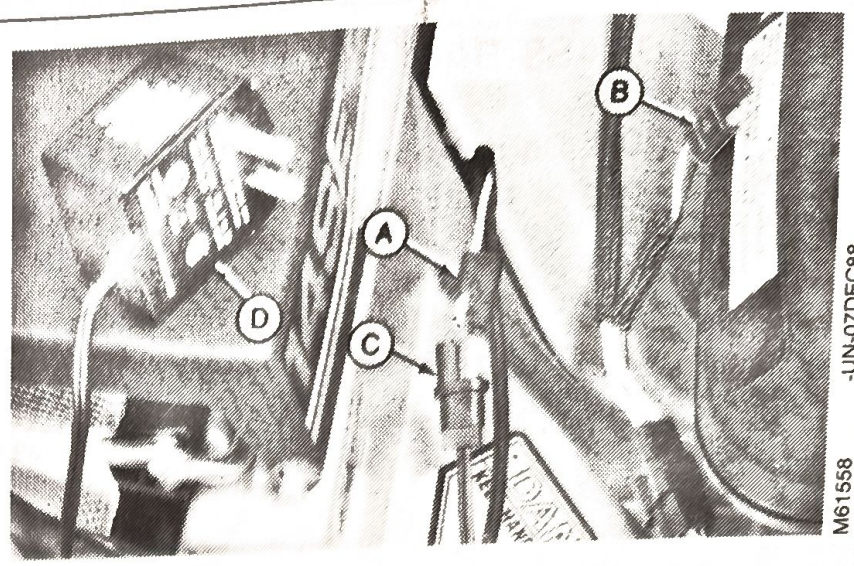
M61531 -UN-13OCT88



M61557 -UN-07DEC88

MX,ASBV,B -19-10AUG88

CHARGE BATTERY



M61558 -UN-07DEC88

IMPORTANT: Use only charger supplied with mower. Other chargers may permanently damage battery.

1. Disconnect battery wire connector (A) from engine wire connector (B).

2. Connect charger cord connector (C) to battery wire connector.

3. Plug charger (D) into 115-volt house receptacle.

IMPORTANT: To help battery last longer, charge battery 24—36 hours before first battery use.

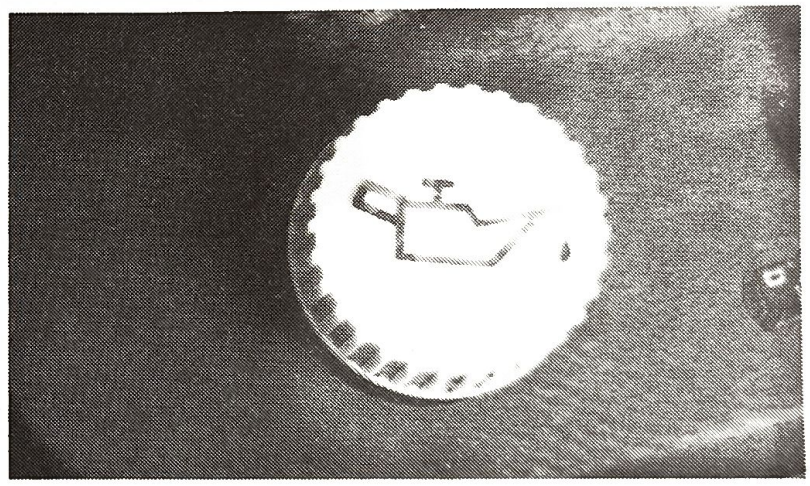
4. Charge battery 24—36 hours.

5. Unplug cord from house receptacle, then from battery.

6. Connect battery wire connector to engine wire connector.

MX,ASBV,C -19-26MAY89

ADD ENGINE OIL—4-CYCLE ENGINE


M61458 -UN-01SEP88

IMPORTANT: Engine is shipped without oil. You must add oil before you run engine.

1. Remove dipstick shown.

2. Add 1-1/4 pt (0.6 L) oil through dipstick tube. See ENGINE OIL in Fuels and Lubricants section for correct oil.

3. Check oil level:
—Install dipstick. DO NOT TIGHTEN IT: LET THREADS REST ON TOP OF TUBE.
—Check oil on dipstick: Oil should be to FULL mark. If not, add oil.

4. Install and tighten dipstick.

5. Remove NO OIL tag.

IMPORTANT: Change oil (and filter, if equipped) after first 5 hours of operation.

MX,ASBV,E -19-10AUG88

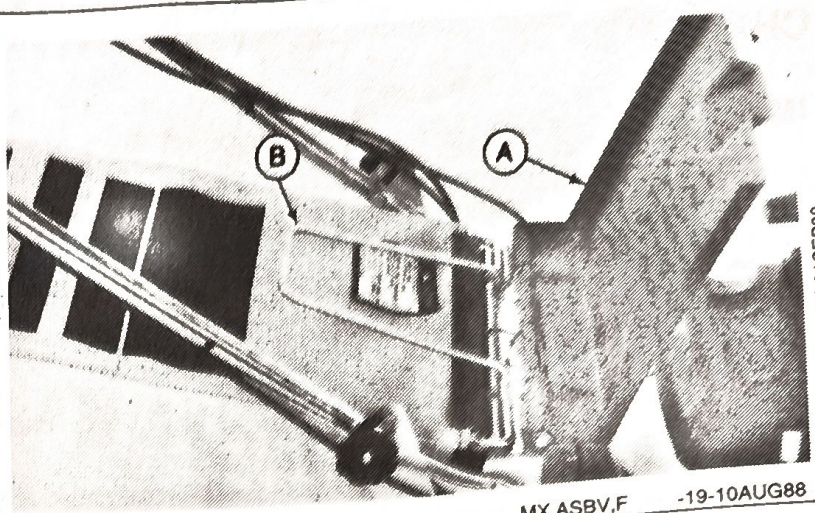
INSTALL GRASS BAG

CAUTION: Do not operate mower without grass bag or chute (optional).

1. Lift door (A).

2. Grasp handle (B).

3. Install bag.



MX,ASBV,F -19-10AUG88

TEST MOWER OPERATION

1. Put enough fuel in tank to test mower operation. See Fuels and Lubricants section for correct fuel.

2. Start engine and check mower operation. See Operation section.

3. Close fuel shutoff valve.

MX,ASBV,G -19-14OCT88

Specifications

MOWER SPECIFICATIONS

Cutting height range	1/2—3-1/2 in. (13—90 mm)
Number of cutting heights in 1/2-in. (13 mm) steps	7
Blade hardware torque	55 lb-ft (75 N·m)
Self-propelled models:	
—Travel speed range	1.2—4.1 mph (1.9—6.6 kmh)
—Number of travel speeds	5
—Drive	V-belt off engine
Safety system	Blade-brake clutch
Wheel diameter	8 in. (200 mm)
Bagger capacity	2.5 bu (3.1 cu ft)
Shipping weight (approximate)	100 lb (45 kg)

(Specifications and design subject to change without notice)

MX,SPBV,A -19-10AUG88

BRIGGS AND STRATTON 2-CYCLE ENGINE FOR MODELS 12PB AND 12SB

Horsepower	4 hp (3 Kw)
Operating range	3000—3200 rpm
Idle speed	1750 rpm
Fuel tank capacity	2 qt (1.9 L)
Fuel/Oil mixture	50:1
Spark plug	Champion RJ19LM
Spark plug gap	0.030 in. (0.76 mm)
Spark plug torque	15 lb-ft (20 N·m)

MX,SPBV,B -19-10AUG88

KAWASAKI 4-CYCLE ENGINE FOR MODELS 14PB, 14SB, AND 14SE

Horsepower	4.5 hp (3.4 Kw)
Operating Range	3000—3150 rpm
Idle speed	1500 rpm
Engine oil capacity w/o filter	1-1/4 pt (0.60 L)
Fuel tank capacity	1.4 qt (1.3 L)
Spark plug	NGK-BP6ES
Spark plug gap	0.030 in. (0.76 mm)
Spark plug torque	15 lb-ft (20 N·m)

MX,SPBV,C -19-10AUG88

120789

MACHINE NUMBERS

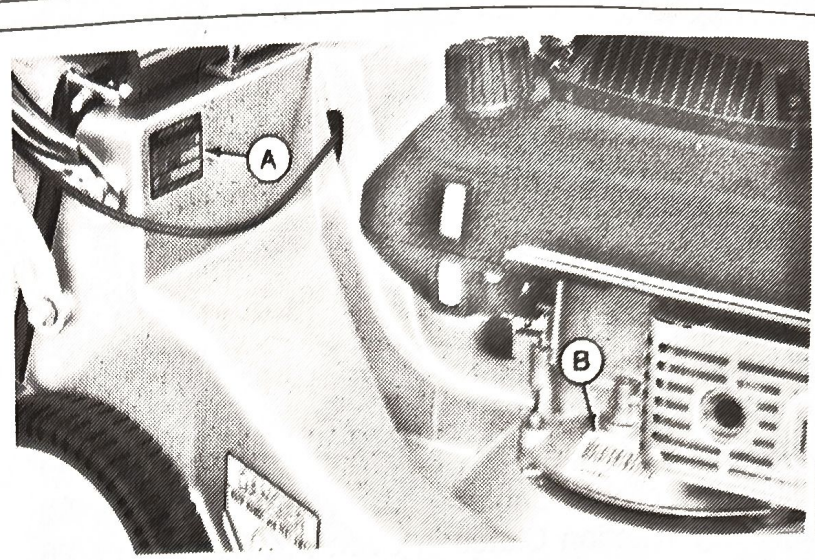
Write numbers below. Your John Deere dealer needs these numbers when you order parts.

Mower Model 145B

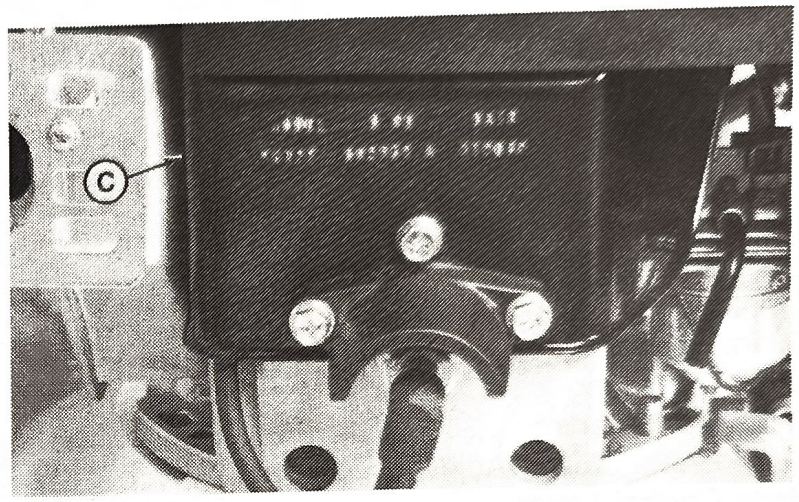
Mower Serial Number (A) GX145BX105645

4-Cycle Engine Serial Number (B) FC 150V220577

2-Cycle Engine Model, Type, and Date Numbers (C) _____



M62537 -UN-20JUN89



M61479 -UN-01SEP88

MX,SPBV,D -19-08JUN89

DATE 3-21-91

Tech Service
1-800-572-7448

7A-7P (CENTRAL)

TOP 1/16 25
BOTH 1/8 25
3.7

120789

Index

Page

A

Adjusting Blade Brake Clutch 30
Adjusting Choke 33
Adjusting Cutting Height 9
Adjusting Handle Height 9
Adjusting Slow Idle 33
Adjusting Throttle Cable 32
Adjusting Traction Clutch 28
Air Cleaner 24
Assembly Section 39
Axle Bearings, Lubricate 26

B

Bag, Grass 15
Bagging Tips 15
Balancing Blade 36
Battery Charging 34
Belt Area, Cleaning 31
Blade Brake Clutch, Adjust 30
Blade Control Lever 12
Blade Hardware 25
Blade, Balance 36
Blade, Check and Remove 35
Blade, Install 36
Blade, Sharpening 36

C

Carburetor, Adjust 33
Changing Engine Oil 26
Changing Oil Filter (Optional) 28
Charging Battery 34
Checking Belt Area 31
Checking Blade 35
Checking Oil Level 23
Choke, Adjust 33
Chute, Discharge (Optional) 15
Cleaning Air Cleaner Elements 24
Cleaning Fins 31
Cleaning Fuel Cap Vent 37
Cleaning Spark Plug 27
Cleaning Top of Transmission 22, 27
Clutch, Blade Brake 30
Clutch, Traction 28
Controls Section 8
Controls, Engine 8
Controls, Handle 8
Controls, Mower 8

Page

Cutting Height, Adjust 9

D

Discharge Chute (Optional) 15

E

Electric Starting 10
Elements, Air Cleaner 24
Engine Controls 8
Engine Oil Change 26
Engine Oil Level 23
Engine Oil Specifications 18
Engine Specifications 43
Engine Starting 10
Engine, Stopping 11

F

Filter, Oil (Optional) 28
Fins, Cleaning 31
Folding Handle 16
Forward Travel Lever 12
Fuel Cap Vent, Cleaning 37
Fuel, Mixing 19
Fuels 18
Fuels and Lubricants Section 18

G

Gapping Spark Plug 27
Grass Bag 15
Grass Buildup 31
Grease 19

H

Handle Controls 8
Handle Height, Adjust 9
Handle, Folding and Unfolding 16
Hardware Blade 25

I

Idle Speed, Adjust 33
Installing Blade 36

Page

L

Lubricants 18
Lubricating Axle Bearings 26

M

Machine Numbers 44
Manual Starting 11
Mixing 2-Cycle Engine Fuel 19
Mower Controls 8
Mower Specifications 42
Mowing Tips 14

N

Numbers, Serial 44

O

Oil Change 26
Oil Filter (Optional) 28
Oil Level, Engine 23
Oil Specifications 18
Operation Section 9
Operation, Test Mower 41

R

Rear Axle Bearing, Lubricate 26
Removing Blade 35

S

Safety Section 2
Self-Propelled Travel 12
Serial Numbers 44
Service Interval Chart 22
Service Section 22
Sharpening Blade 36
Slow Idle, Adjust 33
Spark Plug 27
Specifications Section 42
Specifications, Engine 43
Specifications, Mower 42
Speeds, Travel 13
Starting Engine with Battery 10
Starting Engine Manually 11
Stopping Engine 11

Page

Storage Section 38
Storing Mower 38

T

Test Mower Operation 41
Throttle Cable, Adjust 32
Tightening Blade Hardware 25
Tips for Mowing 14
Tips For Bagging 15
Traction Clutch, Adjust 28
Transmission, Cleaning Top 22, 27
Transporting Mower 17
Travel Speeds 13
Troubleshooting Section 20

U

Unfolding Handle 16

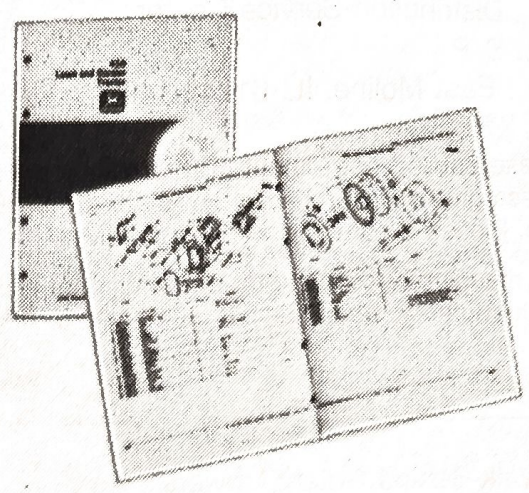
V

Vent, Fuel Cap 37

John Deere Service Literature

PARTS CATALOG

The parts catalog lists service parts available for your machine with exploded view illustrations to help you identify the correct parts. It is also useful in assembling and disassembling.



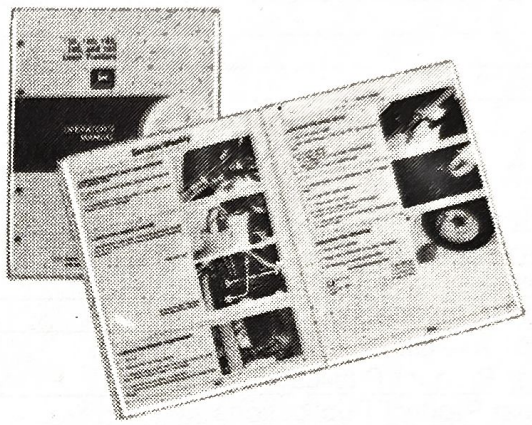
TS189 -UN-17JAN89

O53,PARTS -19-27NOV85

OPERATOR'S MANUAL

The operator's manual provides safety, operating, maintenance, and service information about John Deere machines.

An extra copy of the operator's manual is important if the copy furnished with your machine is misplaced.



TS190 -UN-17JAN89

O53,OM -19-27NOV85

FUNDAMENTALS OF SERVICE MANUALS

These basic manuals cover most makes and types of machines. FOS manuals tell you how to service machines. Each manual starts with basic theory and is fully illustrated with colorful diagrams and photographs. Both the "whys" and "hows" of adjustments and repairs are covered in this reference library.

TS194 -UN-02DEC88

O53,CPFOS -19-27NOV85

John Deere Service Literature

John Deere Distribution Service Center
Department S/P
1400-13 St., East Moline, IL. 61244-1493

To order these publications, fill out this form and mail it with payment to the address given. Make checks payable to Deere & Co. Service Publications. Please allow three weeks for delivery.

If you want manuals or catalogs for equipment not shown on this list, list the model number, serial number, and name of the product.

Please ship to . . .

Name _____

Address _____

City _____ State _____

Zip _____ Phone _____

Title	Order Number	Price Each	x Quantity	= Total
21-Inch Walk-Behind Rotary Mowers				
Parts Catalog for All Models	PC-2264	$ 6.75	x	=
Operator's Manual	OM-M79671	1.25	x	=
			x	=
			x	=
			x	=
			x	=
			x	=
			x	=
			x	=
FOS Manual—Engines	FCP-80101B	14.60	x	=
FOS Manual—Electrical Systems	FCP-83101B	13.20	x	=
FOS Manual—Hydraulics	FCP-82101B	11.65	x	=
FOS Manual—Power Trains	FCP-81101B	11.65	x	=
FOS Set of 4 texts above	FCP-800	Set 46.00	x	=
Catalogs of Available Service Publications:				
Consumer Product Publications	CPC-1704	No Charge		
Agricultural Product Publications	CPC-1703	No Charge		
Industrial Product Publications	CPC-1852	No Charge		
		Subtotal		

Publication Total	Shipping, Handling & Insurance
$ .50 to $ 14.99	$ 3.00
15.00 to 29.99	4.00
30.00 to 49.99	5.50
50.00 to 74.99	7.00
75.00 to 99.99	8.50
100.00 to 249.99	12.50
250.00 and Over	22.00

Illinois state residents add 6.25% and Iowa state residents add 4% for Retail Occupation Tax or show tax exemption number.

Shipping, Handling, & Insurance

Check or money order in U.S. Dollars enclosed . . . . . Total
(Do not send cash or stamps)

Prices subject to change without notice.
SP-317 Apr-89

MX,SLIT,79671 -19-10AUG88

John Deere is at your service when you need it

John Deere takes pride in providing superior service. We'll be around when you need us. To help minimize downtime, we maintain a large and varied parts inventory. Precision tools and testing equipment enable our dealerships to locate and correct troubles quickly. We hold regular training schools for service technicians so they know your equipment and how to maintain it. Our goal is to provide prompt, efficient service through competent dealerships.

Should you experience any difficulty obtaining satisfactory parts or service:

- Discuss your problem with your dealership service manager.
- If still unable to properly resolve, see the dealership manager.
- If you have a persistent problem that your dealership is unable to satisfy, contact the John Deere sales branch in the area in which you live. (See the map below to locate the sales branch.) The sales branch will also help you locate the dealership nearest you.

Sales Branch

1. JOHN DEERE COMPANY
   701 Georgeville Road
   Columbus, OH 43228
   614-275-1500

2. JOHN DEERE COMPANY
   2001 Deere Dr.
   Conyers, GA 30208
   404-922-7040

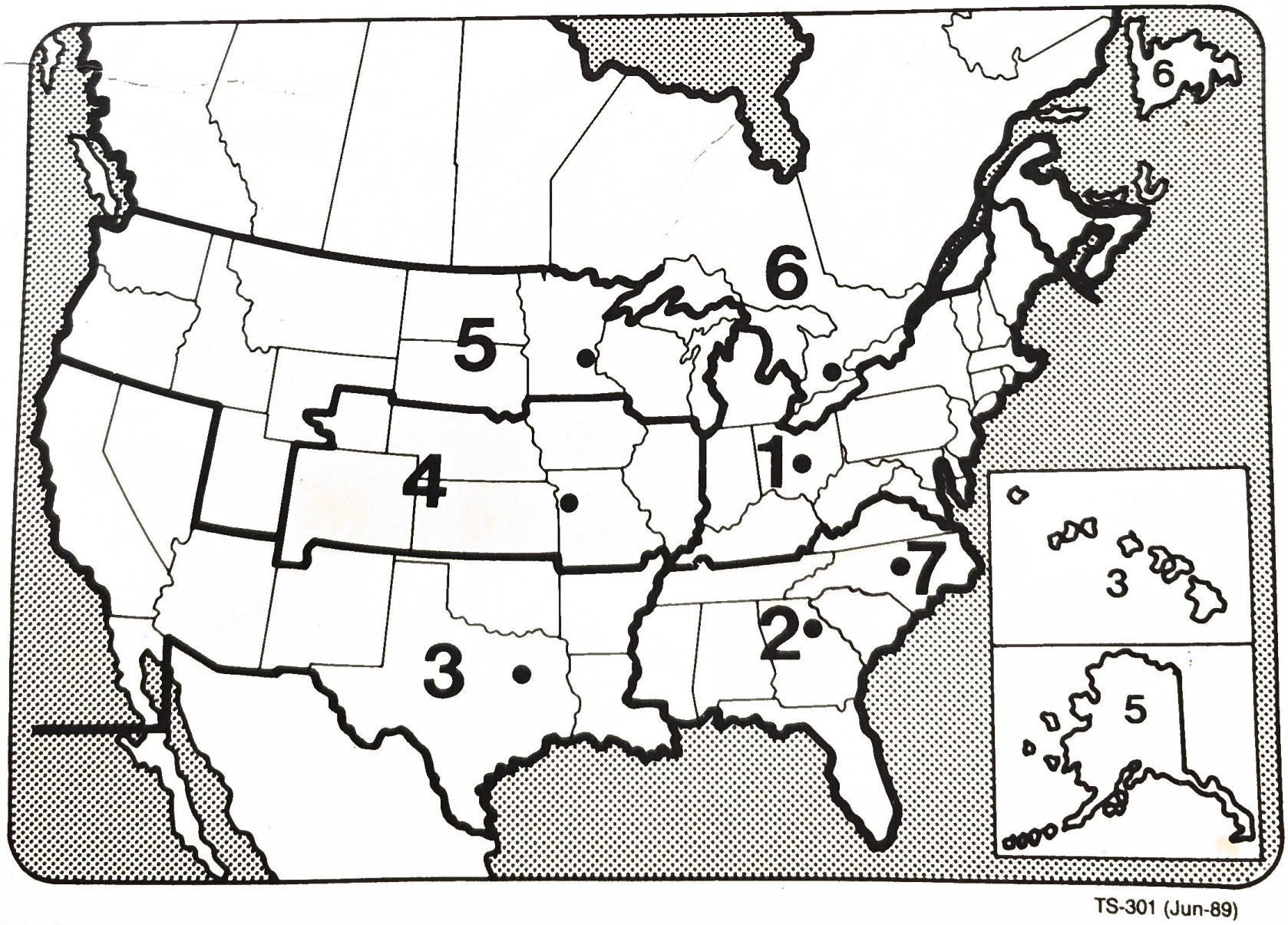
3. JOHN DEERE COMPANY
   10650 Hines Boulevard
   Dallas, TX 75220-2635
   214-352-1701

4. JOHN DEERE COMPANY
   3210 East 85th Street
   Southeast Station
   Kansas City, MO 64132-2586
   816-361-4000

5. JOHN DEERE COMPANY
   2001 West 94th Street
   Bloomington, MN 55431-2311
   612-887-6200

6. JOHN DEERE COMPANY
   South Service Road at Hunter
   Grimsby, Ontario, Canada L3M 4H5
   416-945-9281

7. JOHN DEERE COMPANY
   4401 Bland Road, Suite 200
   Raleigh, NC 27609-6203
   919-850-0123
   (U.S. Residential Dealers)



TS-301 (Jun-89)

SAFETY
live with it

JOHN DEERE LAWN MOWERS

JOHN DEERE

Five speeds keep pace with the way you mow

John Deere self-propelled mowers are an investment in leisure time.

Thanks to an exclusive 5-speed gear drive, you'll be able to finish as fast as your legs will carry you. Leaving you more time for more important pursuits.

Five models are available. Three self-propelled (12SB, 14SB and 14SE) and two push-type (12PB and 14PB).

Each is driven by a dependable, high-torque engine.

A 4½-hp, 4-cycle Kawasaki. With overhead valves for better fuel economy. And pressure lubrication (oil filter optional) for longer life.

Or a 4-hp, 2-cycle Zenoah/Briggs. Because you premix the gas and oil, it is especially suited to hillside mowing.

Every moving part gets proper lubrication all the time.

John Deere mowers are quick starting. Just one or two pulls and you're in business.

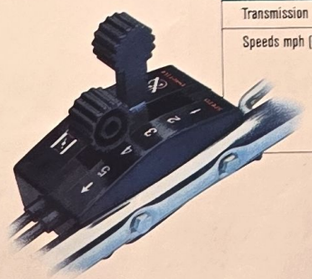
Overhead valves, large recoil starter and a compression release valve reduce pull effort on the Kawasaki by about 40 percent compared to many competitive engines. For the ultimate in fast starts, an electric start model is available.

Thatcher attachment controls thatch buildup, sets up grass for more uniform mowing. For use with self-propelled models only.

An easy-on, easy-off bagger lifts with just one hand. No zippers, no clasps to contend with.

Rugged metal frame rests securely in a groove just above the mower's rear discharge.

Big 2½-bushel rear bagger has large 11.6 x 14.25-inch wide opening. It has 20 percent more area than Honda or Toro for easier dumping.



	JOHN DEERE	HONDA	TORO	SNAPPER
Transmission	5-speed gear drive	2-speed gear drive	3-speed gear drive	6-speed disc drive
Speeds mph (km/h)				
1	1.2 (1.93)	1.8 (2.89)	1.8 (2.89)	1.0 (1.6)
2	1.8 (2.89)	2.7 (4.32)	2.7 (4.32)	1.5 (2.40)
3	2.4 (3.86)	———	3.8 (6.08)	1.7 (2.72)
4	3.0 (4.87)	———	———	2.1 (3.36)
5	4.1 (6.60)	———	———	2.5 (4.00)
6	———	———	———	2.9 (4.64)

Reliable gear drive with detented control on the handlebar lets you match mowing speed to your gait. Or to mowing conditions at hand. Slow around trees and shrubs. Wide open in wide open spaces.

SPECIFICATIONS

	12PB	12SB	14SB	14SE	14PB
Engine	4-hp (3.0 kW), 2-cycle Zenoah/Briggs		4½-hp (3.4 kW), 4-cycle Kawasaki		
Valve type	Side	Side	Overhead	Overhead	Overhead
Displacement	8.6 cu. in. (141 cm³)	8.6 cu. in. (141 cm³)	9.34 cu. in. (153 cm³)	9.34 cu. in. (153 cm³)	9.34 cu. in. (153 cm³)
Choke	Manual	Manual	Manual	Manual	Manual
Starter	Recoil	Recoil	Recoil	Electric, recoil backup (12-volt, 2.9 amp/hr. sealed lead acid battery)	Recoil
Fuel capacity	2 U.S. qt. (1.89 L)	2 U.S. qt. (1.89 L)	1.6 U.S. qt. (1.5 L)	1.6 U.S. qt. (1.5 L)	1.6 U.S. qt. (1.5 L)
Carburetor	Float type				
Throttle control	Remote on handle				
Compliance system	Blade brake clutch				
Cutting heights	Seven; ½ to 3½ inches (1.27 to 8.9 cm)				
Cutting width	21 in. (533 mm)	21 in. (533 mm)	21 in. (533 mm)	21 in. (533 mm)	21 in. (533 mm)
Deck material	Cast aluminum	Cast aluminum	Cast aluminum	Cast aluminum	Cast aluminum
Discharge	Rear with side discharge chute optional				
Drive	Push-type	5-speed gear transaxle with belt clutch			Push-type
Speeds	NA	1st gear 1.2 mph (1.93 km/h) 2nd gear 1.8 mph (2.89 km/h) 3rd gear 2.4 mph (3.86 km/h) 4th gear 3.0 mph (4.87 km/h) 5th gear 4.1 mph (6.60 km/h)			NA
Adjustable handle	Standard				
Side discharge chute	Optional				
Rear grass bagger (2½ bushel)	Standard				
Shipping weight	90 lb. (40.8 kg)	97 lb. (44 kg)	97 lb. (44 kg)	108 lb. (49 kg)	90 lb. (40.8 kg)

(Specifications and design subject to change without notice.)

SAFETY live with it

Shetlers 666-8400 $599+TAX
Bills 688-4413

JOHN DEERE JDFP FINANCE PLANS

GIVE YOURSELF CREDIT Ask your dealer for all the facts on John Deere's flexible finance plans.

DKA82 Litho in U.S.A. (89-12)